

R25. Administrative Services, Finance.

R25-7. Travel-Related Reimbursements for State Employees.

R25-7-1. Purpose.

The purpose of this rule is to establish procedures to be followed by departments to pay travel-related reimbursements to state employees.

R25-7-2. Authority and Exemptions.

This rule is established pursuant to:

(1) Section 63A-3-107, which authorizes the Division of Finance to make rules governing in-state and out-of-state travel expenses; and

(2) Section 63A-3-106, which authorizes the Division of Finance to make rules governing meeting per diem and travel expenses for board members attending official meetings.

R25-7-3. Definitions.

(1) "Agency" means any department, division, commission, council, board, bureau, committee, office, or other administrative subunit of state government.

(2) "Board" means a board, commission, council, committee, task force, or similar body established to perform a governmental function.

(3) "Department" means all executive departments of state government.

(4) "Finance" means the Division of Finance.

(5) "Home-Base" means the location the employee leaves from and/or returns to.

(6) "Per diem" means an allowance paid daily.

(7) "Policy" means the policies and procedures of the Division of Finance, as published in the "Accounting Policies and Procedures."

(8) "Rate" means an amount of money.

(9) "Reimbursement" means money paid to compensate an employee for money spent.

(10) "State employee" means any person who is paid on the state payroll system.

R25-7-4. Eligible Expenses.

(1) Reimbursements are intended to cover all normal areas of expense.

(2) Requests for reimbursement must be accompanied by original receipts for all expenses except those for which flat allowance amounts are established.

R25-7-5. Approvals.

(1) For insurance purposes, all state business travel, whether reimbursed by the state or not, must have prior approval by an appropriate authority. This also includes non-state employees where the state is paying for the travel expenses.

(2) Both in-state and out-of-state travel must be approved by the Executive Director or designee. The approval of in-state travel reimbursement forms may be considered as documentation of prior approval for in-state travel. Prior approval for out-of-state travel should be documented on form FI5 - "Request for Out-of-State Travel Authorization".

(3) Exceptions to the prior approval for out-of-state travel must be justified in the comments section of the Request for Out-of-State Travel Authorization, form FI 5, or on an attachment, and must be approved by the Department Director or the designee.

(4) The Department Director, the Executive Director, or the designee must approve all travel to out-of-state functions where more than two employees from the same department are attending the same function at the same time.

R25-7-6. Reimbursement for Meals.

(1) State employees who travel on state business may be

eligible for a meal reimbursement.

(2) The reimbursement will include tax, tips, and other expenses associated with the meal.

(3) Allowances for in-state travel differ from those for out-of-state travel.

(a) The daily travel meal allowance for in-state travel is \$42.00 and is computed according to the rates listed in the following table.

TABLE 1

In-State Travel Meal Allowances

Meals	Rate
Breakfast	\$10.00
Lunch	\$14.00
Dinner	\$18.00
Total	\$42.00

(b) The daily travel meal allowance for out-of-state travel is \$46.00 and is computed according to the rates listed in the following table.

TABLE 2

Out-of-State Travel Meal Allowances

Meals	Rate
Breakfast	\$10.00
Lunch	\$14.00
Dinner	\$22.00
Total	\$46.00

(4) When traveling to a Tier I premium location (Anchorage, Chicago, Hawaii, New York City, San Francisco, and Seattle), the traveler may choose to accept the per diem rate for out-of-state travel (as shown above) or to be reimbursed at the actual meal cost, with original receipts, up to \$67 per day.

When traveling to a Tier II premium location (Atlanta, Baltimore, Boston, Dallas, Los Angeles, San Diego, and Washington, DC), the traveler may choose to accept the per diem rate for out-of-state travel (as shown above) or to be reimbursed at the actual meal cost, with original receipts, up to \$58 per day.

(a) The traveler will qualify for premium rates on the day the travel begins and/or the day the travel ends only if the trip is of sufficient duration to qualify for all meals on that day.

(b) Complimentary meals of a hotel, motel and/or association and meals included in registration costs are deducted from the premium location allowance as follows:

Tier I Location

(i) If breakfast is provided deduct \$15, leaving a premium allowance for lunch and dinner of actual up to \$52.

(ii) If lunch is provided deduct \$20, leaving a premium allowance for breakfast and dinner of actual up to \$47.

(iii) If dinner is provided deduct \$32, leaving a premium allowance for breakfast and lunch of actual up to \$35.

Tier II Location

(i) If breakfast is provided deduct \$13, leaving a premium allowance for lunch and dinner of actual up to \$45.

(ii) If lunch is provided deduct \$17, leaving a premium allowance for breakfast and dinner of actual up to \$41.

(iii) If dinner is provided deduct \$28, leaving a premium allowance for breakfast and lunch of actual up to \$30.

(c) The traveler must use the same method of reimbursement for an entire day.

(d) Actual meal cost includes tips.

(e) Alcoholic beverages are not reimbursable.

(5) When traveling in foreign countries, the traveler may choose to accept the per diem rate for out-of-state travel (as shown above) or to be reimbursed the actual meal cost, with original receipts, not to exceed the United States Department of

State Meal and Incidental Expenses (M and IE) rate for their location.

(a) The traveler may use both reimbursement methods during a trip; however, they must use the same method of reimbursement for an entire day.

(b) Actual meal cost includes tips.

(c) Alcoholic beverages are not reimbursable.

(6) The meal reimbursement calculation is comprised of three parts:

(a) The day the travel begins. The traveler's entitlement is determined by the time of day the traveler leaves their home base (the location the employee leaves from and/or returns to), as illustrated in the following table.

TABLE 3

The Day Travel Begins

1st Quarter a.m. 12:00-5:59 *B, L, D In-State \$42.00 Out-of-State \$46.00 *B = Breakfast, L = Lunch, D = Dinner	2nd Quarter a.m. 6:00-11:59 *L, D	3rd Quarter p.m. 12:00-5:59 *D	4th Quarter p.m. 6:00-11:59 *no meals
	\$32.00	\$18.00	\$0
	\$36.00	\$22.00	\$0

(b) The days at the location.

(i) Complimentary meals of a hotel, motel, and/or association and meals included in the registration cost are deducted from the total daily meal allowance. However, continental breakfasts will not reduce the meal allowance. Please Note: For breakfast, if a hot food item is offered, it is considered a complimentary meal, no matter how it is categorized by the hotel/conference facility. The meal is considered a "continental breakfast" if no hot food items are offered.

(ii) Meals provided on airlines will not reduce the meal allowance.

(c) The day the travel ends. The meal reimbursement the traveler is entitled to is determined by the time of day the traveler returns to their home base, as illustrated in the following table.

TABLE 4

The Day Travel Ends

1st Quarter a.m. 12:00-6:00 *no meals In-State \$0	2nd Quarter a.m. 6:01-12:00 *B	3rd Quarter p.m. 12:01-6:00 *B, L	4th Quarter p.m. 6:01-11:59 *B, L, D
	\$10.00	\$24.00	\$42.00
	\$10.00	\$24.00	\$46.00

(7) An employee may be authorized by the Department Director or designee to receive a taxable meal allowance when the employee's destination is at least 100 miles one way from their home base and the employee does not stay overnight.

(a) Breakfast is paid when the employee leaves their home base before 6:00 a.m.

(b) Lunch is paid when the trip meets one of the following requirements:

(i) The employee is on an officially approved trip that warrants entitlement to breakfast and dinner.

(ii) The employee leaves their home base before 10 a.m. and returns after 2 p.m.

(iii) The Department Director provides prior written approval based on circumstances.

(c) Dinner is paid when the employee leaves their home base and returns after 6:00 p.m.

(d) The allowance is not considered an absolute right of the employee and is authorized at the discretion of the Department Director or designee.

R25-7-7. Meals for Statutory Non-Salaried State Boards.

(1) When a board meets and conducts business activities during mealtime, the cost of meals may be charged as public expense.

(2) Where salaried employees of the State of Utah or other advisors or consultants must, of necessity, attend such a meeting in order to permit the board to carry on its business, the meals of such employees, advisors, or consultants may also be paid. In determining whether or not the presence of such employees, advisors, or consultants is necessary, the boards are requested to restrict the attendance of such employees, advisors, or consultants to those absolutely necessary at such mealtime meetings.

R25-7-8. Reimbursement for Lodging.

State employees who travel on state business may be eligible for a lodging reimbursement.

(1) For stays at a conference hotel, the state will reimburse the actual cost plus tax and any mandatory fees charged by the hotel for both in-state and out-of-state travel. The traveler must include the conference registration brochure with the Travel Reimbursement Request, form FI 51A or FI 51B.

(2) For in-state lodging at a non-conference hotel, the state will reimburse the actual cost up to \$70 per night for single occupancy plus tax and any mandatory fees charged by the hotel except as noted in the table below:

TABLE 5

Cities with Differing Rates

Beaver	\$75.00 plus tax and mandatory fees
Blanding	\$75.00 plus tax and mandatory fees
Bluff	\$90.00 plus tax and mandatory fees
Brigham City	\$80.00 plus tax and mandatory fees
Bryce Canyon City	\$75.00 plus tax and mandatory fees
Cedar City	\$80.00 plus tax and mandatory fees
Duchesne	\$80.00 plus tax and mandatory fees
Ephraim	\$75.00 plus tax and mandatory fees
Farmington	\$85.00 plus tax and mandatory fees
Fillmore	\$75.00 plus tax and mandatory fees
Garden City	\$80.00 plus tax and mandatory fees
Green River	\$85.00 plus tax and mandatory fees
Hanksville	\$75.00 plus tax and mandatory fees
Heber	\$85.00 plus tax and mandatory fees
Kanab	\$85.00 plus tax and mandatory fees
Layton	\$85.00 plus tax and mandatory fees
Logan	\$85.00 plus tax and mandatory fees
Mexican Hat	\$90.00 plus tax and mandatory fees
Moab	\$100.00 plus tax and mandatory fees
Monticello	\$80.00 plus tax and mandatory fees
Ogden	\$85.00 plus tax and mandatory fees
Park City/Midway	\$100.00 plus tax and mandatory fees
Price	\$75.00 plus tax

	and mandatory fees
Provo/Orem/Lehi/American Fork/ Springville	\$85.00 plus tax and mandatory fees
Roosevelt/Ballard	\$90.00 plus tax and mandatory fees
Salt Lake City Metropolitan Area (Draper to Centerville), Tooele	\$100.00 plus tax and mandatory fees
St. George/Washington/Springdale/ Hurricane	\$85.00 plus tax and mandatory fees
Torrey	\$85.00 plus tax and mandatory fees
Tremonton	\$90.00 plus tax and mandatory fees
Vernal	\$95.00 plus tax and mandatory fees
All Other Utah Cities	\$70.00 plus tax and mandatory fees

(3) State employees traveling less than 50 miles from their home base are not entitled to lodging reimbursement. Miles are calculated from either the departure home-base or from the destination to the traveler's home-base. The traveler may leave from one home-base and return to a different home-base. For example, if the traveler leaves from their residence, then the home-base for departure calculations is their residence. If the traveler returns to where they normally work (ie. Cannon Health Building), then the home-base for arrival calculations is the Cannon Health Building.

(a) In some cases, agencies must use judgement to determine a traveler's home-base. The following are some things to consider when determining a traveler's home-base.

(i) Is the destination less than 50 miles from the traveler's home or normal work location? If the destination is less than 50 miles from either the traveler's home or from their normal work location, then generally the employee should not be reimbursed for lodging.

(ii) Is there a valid business reason for the traveler to go to the office (or to some other location) before driving to the destination?

(iii) Is the traveler required to work at the destination the next day?

(iv) Is the traveler going directly home after the trip, or is there a valid business reason for the traveler to first go to the office (or to some other location)?

(v) Even if "it is not specifically against policy", would the lodging be considered necessary, reasonable and in the best interest of the State?

(4) When the State of Utah pays for a person from out-of-state to travel to Utah, the in-state lodging per diem rates will apply.

(5) For out-of-state travel stays at a non-conference hotel, the state will reimburse the actual cost per night plus tax and any mandatory fees charged by the hotel, not to exceed the federal lodging rate for the location. These reservations must be made through the State Travel Office.

(6) The state will reimburse the actual cost per night plus tax and any mandatory fees charged by the hotel for in-state or out-of-state travel stays where the department/traveler makes reservations through the State Travel Office.

If lodging is not available at the allowable per diem rate in the area the employee needs to stay, the State Travel Office will book a hotel with the best available rate. In this circumstance, the employee will be reimbursed at the actual rate booked.

If an employee chooses to stay at a hotel that costs more than the allowable per diem rate, the employee will only be reimbursed for the allowable per diem rate plus tax and any mandatory fees charged by the hotel. These instances will be audited 100% by the State Finance Post-Auditors.

(7) Lodging is reimbursed at the rates listed in Table 5 for single occupancy only. For double state employee occupancy, add \$20, for triple state employee occupancy, add \$40, for

quadruple state employee occupancy, add \$60.

(8) Exceptions will be allowed for unusual circumstances when approved in writing by the traveler's Department Director or designee prior to the trip.

(a) For out-of-state travel, the approval may be on the form FI 5.

(b) Attach the written approval to the Travel Reimbursement Request, form FI 51B or FI 51D.

(9) A proper receipt for lodging accommodations must accompany each request for reimbursement.

A proper receipt is a copy of the registration form generally used by motels and hotels which includes the following information: name of motel/hotel, street address, town and state, telephone number, current date, name of person/persons staying at the motel/hotel, date(s) of occupancy, amount and date paid, number in the party, and (single, double, triple, or quadruple occupancy).

(10) When lodging is required, travelers should stay at the lodging facility nearest to the meeting/training/work location where state lodging per diem rates are accepted in order to minimize transportation costs.

(11) Travelers may also elect to stay with friends or relatives or use their personal campers or trailer homes instead of staying in a hotel.

(a) With proof of staying overnight away from home on approved state business, the traveler will be reimbursed the following:

(i) \$25 per night with no receipts required or

(ii) Actual cost up to \$40 per night with a signed receipt from a facility such as a campground or trailer park, not from a private residence.

(12) Travelers who are on assignment away from their home base for longer than 90 days will be reimbursed as follows:

(a) First 30 days - follow regular rules for lodging and meals. Lodging receipt is required.

(b) After 30 days - \$46 per day for lodging and meals. No receipt is required.

R25-7-9. Reimbursement for Incidentals.

State employees who travel on state business may be eligible for a reimbursement for incidental expenses.

(1) Travelers will be reimbursed for actual out-of-pocket costs for incidental items such as baggage tips, transportation costs, maid service, and bellman. Gratuities/tips for various services such as taxi/shuttle, assistance with baggage, maid service, and bellman, may be reimbursed up to a combined maximum of \$5.00 per day.

(a) Tips for doormen and meals are not reimbursable.

(b) No other gratuities will be reimbursed.

(c) Include an original receipt for each individual incidental item above \$19.99.

(2) The state will reimburse incidental ground transportation and parking expenses.

(a) Travelers shall document all official business use of taxi, bus, parking, and other ground transportation including dates, destinations, parking locations, receipts, and amounts.

(b) Personal use of such transportation to restaurants is not reimbursable.

(c) The maximum that airport parking will be reimbursed is the economy lot parking rate at the airport they are flying out of. A receipt is required for amounts of \$20 or more.

(3) Registration should be paid in advance on a state warrant, or with a state purchasing card.

(a) A copy of the approved FI 5 form must be included with the Payment Voucher for out-of-state registrations.

(b) If a traveler must pay the registration when they arrive, the agency is expected to process a Payment Voucher and have the traveler take the state warrant with them.

(4) Telephone calls related to state business are reimbursed at the actual cost.

(a) The traveler shall list the amount of these calls separately on the Travel Reimbursement Request, form FI 51A or FI 51B.

(b) The traveler must provide an original lodging receipt or original personal phone bill showing the phone number called and the dollar amount for business telephone calls and personal telephone calls.

(5) Allowances for personal telephone calls made while out of town on state business overnight may be based on the number of nights away from home. The traveler must provide an original lodging receipt or original personal phone bill showing the phone number called and the dollar amount for personal telephone calls.

(a) Four nights or less - actual amount up to \$2.50 per night.

(b) Five to eleven nights - actual amount up to \$20.00

(c) Twelve nights to thirty nights - actual amount up to \$30.00

(d) More than thirty days - start over

(6) Actual laundry expenses up to \$18.00 per week will be allowed for trips in excess of six consecutive nights, beginning after the sixth night out.

(a) The traveler must provide receipts for the laundry expense.

(b) For use of coin-operated laundry facilities, the traveler must provide a list of dates, locations, and amounts.

(7) An amount of \$5 per day will be allowed for travelers away in excess of six consecutive nights beginning after the sixth night out.

(a) This amount covers miscellaneous incidentals not covered in this rule.

(b) This allowance is not available for travelers going to conferences.

(8) Travel on a Weekend during Trips of More Than 10 Nights' Duration - A department may provide for employees to return home on a weekend when a trip extends longer than ten nights. Reimbursements may be given for costs allowed by these policies.

R25-7-10. Reimbursement for Transportation.

State employees who travel on state business may be eligible for a transportation reimbursement.

(1) Air transportation is limited to Air Coach or Excursion class. Priority seating charges will not be reimbursed unless preapproved by the department director or designee.

(a) All reservations (in-state and out-of-state) should be made through the State Travel Office for the least expensive air fare available at the time reservations are made.

(b) Only one change fee per trip will be reimbursed.

(c) The explanation for the change and any other exception to this rule must be given and approved by the Department Director or designee.

(2) Travelers may be reimbursed for mileage to and from the airport and long-term parking or away-from-the-airport parking.

(a) The maximum reimbursement for parking, whether travelers park at the airport or away from the airport, is the long term parking rate at the airport they are flying out of.

(b) The parking receipt must be included with the Travel Reimbursement Request, form FI 51A or FI 51B for amounts of \$20 or more.

(c) Travelers may be reimbursed, up to the maximum reimbursements rate, for mileage to and from the airport to allow someone to drop them off and to pick them up.

(3) Travelers may use private vehicles with approval from the Department Director or designee.

(a) Only one person in a vehicle may receive the

reimbursement, regardless of the number of people in the vehicle.

(b) Reimbursement for a private vehicle will be at the rate of 40 cents per mile or 53 cents per mile if a state vehicle is not available to the employee.

(i) To determine which rate to use, the traveler must first determine if their department has an agency vehicle (long-term leased vehicle from Fleet Operations) that meets their needs and is reasonably available for the trip (does not apply to special purpose vehicles). If reasonably available, the employee should use an agency vehicle. If an agency vehicle that meets their needs is not reasonably available, the agency may approve the traveler to use either a daily pool fleet vehicle or a private vehicle. If a daily pool fleet vehicle is not reasonably available, the traveler may be reimbursed at 53 cents per mile.

(ii) If a trip is estimated to average 100 miles or more per day, the agency should approve the traveler to rent a daily pool fleet vehicle if one is reasonably available. Doing so will cost less than if the traveler takes a private vehicle. If the agency approves the traveler to take a private vehicle, the employee will be reimbursed at the lower rate of 40 cents per mile.

(c) Agencies may establish a reimbursement rate that is more restrictive than the rate established in this Section.

(d) Any exceptions to this mileage reimbursement rate guidance must be approved in writing by the employees Executive Director or designee.

(e) Mileage will be computed using Mapquest or other generally accepted map/route planning website, or from the latest official state road map and will be limited to the most economical, usually traveled routes.

(f) If the traveler uses a private vehicle on official state business and is reimbursed for mileage, parking charges may be reimbursed as an incidental expense.

(g) An approved Private Vehicle Usage Report, form FI 40, should be included with the department's payroll documentation reporting miles driven on state business during the payroll period.

(h) Departments may allow mileage reimbursement on an approved Travel Reimbursement Request, form FI 51A or FI 51B, if other costs associated with the trip are to be reimbursed at the same time.

(4) A traveler may choose to drive instead of flying if preapproved by the Department Director or designee.

(a) If the traveler drives a state-owned vehicle, the traveler may be reimbursed for meals and lodging for a reasonable amount of travel time; however, the total cost of the trip must not exceed the equivalent cost of the airline trip. The traveler may also be reimbursed for incidental expenses such as toll fees and parking fees.

(b) If the traveler drives a privately-owned vehicle, reimbursement will be at the rate of 40 cents per mile or the airplane fare, whichever is less, unless otherwise approved by the Department Director or designee.

(i) The lowest fare available within 30 days prior to the departure date will be used when calculating the cost of travel for comparison to private vehicle cost.

(ii) A comparison printout which is available through the State Travel Office is required when the traveler is taking a private vehicle.

(iii) The traveler may be reimbursed for meals and lodging for a reasonable amount of travel time; however, the total cost of the trip must not exceed the equivalent cost of an airline trip.

(iv) If the traveler uses a private vehicle on official state business and is reimbursed for mileage, parking charges may be reimbursed as an incidental expense.

(c) When submitting the reimbursement form, attach a schedule comparing the cost of driving with the cost of flying. The schedule should show that the total cost of the trip driving was less than or equal to the total cost of the trip flying.

(d) If the travel time taken for driving during the employee's normal work week is greater than that which would have occurred had the employee flown, the excess time used will be taken as annual leave and deducted on the Time and Attendance System.

(5) Use of rental vehicles must be approved in writing in advance by the Department Director or designee.

(a) An exception to advance approval of the use of rental vehicles shall be fully explained in writing with the request for reimbursement and approved by the Department Director or designee.

(b) Detailed explanation is required if a rental vehicle is requested for a traveler staying at a conference hotel.

(c) When making rental car arrangements through the State Travel Office, reserve the vehicle you need. Upgrades in size or model made when picking up the rental vehicle will not be reimbursed.

(i) State employees should rent vehicles to be used for state business in their own names, using the state contract so they will have full coverage under the state's liability insurance.

(ii) Rental vehicle reservations not made through the State Travel Office must be approved in advance by the Department Director or designee.

(iii) The traveler will be reimbursed the actual rate charged by the rental agency.

(iv) The traveler must have approval for a rental car in order to be reimbursed for rental car parking.

(6) Travel by private airplane must be approved in advance by the Department Director or designee.

(a) The pilot must certify to the Department Director or designee that the pilot is certified to fly the plane being used for state business.

(b) If the plane is owned by the pilot/employee, the pilot must certify the existence of at least \$500,000 of liability insurance coverage.

(c) If the plane is a rental, the pilot must provide written certification from the rental agency that the insurance covers the traveler and the state as insured. The insurance must be adequate to cover any physical damage to the plane and at least \$500,000 for liability coverage.

(d) Reimbursement will be made at 53 cents per mile.

(e) Mileage calculation is based on air mileage and is limited to the most economical, usually-traveled route.

(7) Travel by private motorcycle must be approved prior to the trip by the Department Director or designee. Travel will be reimbursed at 20 cents per mile.

(8) A car allowance may be allowed in lieu of mileage reimbursement in certain cases. Prior written approval from the Department Director, the Executive Director of the Department of Administrative Services, and the Governor is required.

KEY: air travel, per diem allowances, state employees, transportation

August 7, 2017

Notice of Continuation April 15, 2013

63A-3-107

63A-3-106

R68. Agriculture and Food, Plant Industry.**R68-15. Quarantine Pertaining to Japanese Beetle, (*Popillia Japonica*).****R68-15-1. Authority.**

A. Promulgated under authority of Subsection 4-2-2-(1)(j) and 4-2-2(1)(l)(ii).

B. Refer to the Notice of Quarantine, Japanese Beetle, (*Popillia Japonica*), Effective January 4, 1993, issued by Utah Department of Agriculture and Food.

R68-15-2. Pest.

Japanese beetle, *Popillia japonica*, a beetle, family Scarabaeidae, which in the larval state attacks the roots of many plants and as an adult attacks the leaves and fruits of many plants.

R68-15-3. Areas Under Quarantine.

A. The following states have been placed under a general quarantine to prohibit the entry of Japanese Beetle into Utah through the sale of plants and plant products: the entire states of Alabama, Arkansas, Colorado, Connecticut, Delaware, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Nebraska, New Hampshire, New Jersey, New Mexico, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Vermont, Virginia, West Virginia, Wisconsin, and the District of Columbia.

B. The same general quarantine shall apply to the following states in provinces of Canada:

1. In the Province of Ontario: Lincoln, Welland, and Wentworth.

2. In the Province of Quebec: Missiquoi and St. Jean.

C. Any areas not mentioned above where Japanese Beetle has been found or known to occur, shall also be placed under this same general quarantine.

R68-15-4. Articles and Commodities Under Quarantine.

A. The following are hereby declared to be hosts and possible carriers of all stages of the Japanese beetle:

1. Soil, humus, compost and manure (except when commercially packaged and treated);

2. All plants with roots (except bareroot plants free from soil).

3. Grass Sod;

4. Plant crowns or roots for propagation (except when free from soil);

5. Bulbs, corms, tubers, and rhizomes of ornamental plants (except when free from soil);

6. Any other plant, plant part, article, or means of conveyance when it is determined by a Utah State Plant Quarantine Officer to present a hazard of spreading live Japanese beetle due to infestation or exposure to infestation by Japanese beetle.

B. Packing material added to bareroot plants after harvesting would not normally pose a pest risk. Packing material would be covered under (6) above, at the inspector's discretion.

C. Free From Soil - For the purposes of this quarantine, free from soil is defined as soil in amounts that could not contain concealed Japanese beetle larvae or pupae.

R68-15-5. Restrictions.

All commodities covered are prohibited entry into Utah from the area under quarantine unless they have the required certification. Plants may be shipped from the area under quarantine into Utah provided such shipments conform to one of the options below and are accompanied by a certificate issued by an authorized state agricultural official at origin. Note that not all protocols approved in the U.S. Domestic Japanese Beetle

Harmonization Plan are acceptable for Utah. Advance notification of regulated commodity shipment is required. The certificate shall bear the name and address of the shipper and receiver as well as the inspection/certificate date and the signature of state agricultural officer. The certifying official shall mail, FAX or e-mail a copy of the certificate to Director, Plant Industry Division, Utah Department of Agriculture and Food, 350 North Redwood Road, P.O. Box 146500, Salt Lake City, Utah 84114-6500, FAX: (801) 538-7189, e-mail: UDAF-Nursery@utah.gov. The shipper shall notify the receiver to hold such commodities for inspection by the Utah Department of Agriculture and Food. The receiver must notify the Utah Department of Agriculture and Food of the arrival of commodities imported under the provisions of this quarantine and must hold such commodities for inspection. Such certificates shall be issued only if the shipment conforms fully with (a), (b), (c), (d) or (e) below:

(a) Production in an Approved Japanese Beetle Free Greenhouse/Screenhouse. All the following criteria apply: All media must be sterilized and free of soil; All stock must be free of soil (bareroot) before planting into the approved medium; The potted plants must be maintained within the greenhouse/screenhouse during the entire adult flight period; During the adult flight period the greenhouse/screenhouse must be made secure so that adult Japanese beetles cannot gain entry. Security will be documented by the appropriate phytosanitary officials of the origin state department of agriculture and must be specifically approved as a secure area. They shall be inspected by the same officials for the presence of all life stages of the Japanese beetle; The plants and their growing medium must be appropriately protected from subsequent infestation while being stored, packed and shipped; Certified greenhouse/screenhouse nursery stock may not be transported into or through any infested areas unless identity is preserved and adequate safeguards are applied to prevent possible infestation; Each greenhouse/screenhouse operation must be approved by the phytosanitary officials as having met and maintained the above criteria, and issued an appropriate certificate bearing the following declaration: "The rooted plants (or crowns) were produced in an approved Japanese beetle free greenhouse or screenhouse." The certificate accompanying the shipment must have the same statement as an additional declaration.

(b) Production During a Pest Free Window. The entire rooted plant production cycle will be completed within a pest free window, in clean containers with sterilized and soilless growing medium, i.e., planting, growth, harvest, and shipment will occur outside the adult Japanese beetle flight period, June through October. The accompanying phytosanitary certificate shall bear the following additional declaration: "These plants were produced outside the Japanese beetle flight season."

(c) Applications of Approved Regulatory Treatments. All treatments will be performed under direct supervision of a phytosanitary official of the origin state department of agriculture or under a compliance agreement thereof. Treatments and procedures under a compliance agreement will be monitored closely throughout the season. State phytosanitary certificates listing and verifying the treatment used must be forwarded to the receiving state via fax or electronic mail, as well as accompanying the shipment. Note that not all treatments approved in the U.S. Domestic Japanese Beetle Harmonization Plan are acceptable for Utah. The phytosanitary certificate shall bear the following additional declaration: "The rooted plants were treated to control "*Popillia japonica*" according to the criteria for shipment to category 1 states as provided in the U.S. Domestic Japanese Beetle Harmonization Plan and Utah Japanese Beetle Quarantine."

(A) Dip Treatment - B and B and Container Plants. Not approved.

(B) Drench Treatments - Container Plants Only. Not approved for ornamental grasses or sedges. Potting media used must be sterile and soilless, containers must be clean. Field potted plants are not eligible for certification using this protocol. This is a prophylactic treatment protocol targeting eggs and early first instar larvae. If the containers are exposed to a second flight season they must be retreated.

(1) Imidacloprid (Marathon 60WP). Apply one-half (0.5) gram of active ingredient per gallon as a prophylactic treatment just prior to Japanese beetle adult flight season (June 1, or as otherwise determined by the phytosanitary official). Apply tank mix as a drench to wet the entire surface of the potting media. A twenty-four (24) gallon tank mix should be enough to treat 120-140 one-gallon containers. Avoid over drenching so as not to waste active ingredient through leaching. During the adult flight season, plants must be retreated after sixteen (16) weeks if not shipped to assure adequate protection.

(2) Bifenthrin (Talstar Nursery Flowable 7.9%). Mix at the rate of twenty (20) ounces per 100 gallons of water. Apply, as a drench, approximately eight (8) ounces of tank mix per six (6) inches of container diameter.

(C) Media (Granule) Incorporation - Container Plants Only. All pesticides used for media incorporation must be mixed prior to potting and plants potted a minimum of thirty (30) days prior to shipment. Potting media used must be sterile and soilless; containers must be clean. The granules must be incorporated into the media prior to potting. Field potted plants are not eligible for treatment. This treatment protocol targets eggs and early first instar larvae and allows for certification of plants that have been exposed to only one flight season after application. If the containers are to be exposed to a second flight season they must be repotted with a granule incorporated mix or retreated using one of the approved drench treatments. Pesticides approved for media incorporation are:

(1) Imidacloprid (Marathon 1G). Mix at the rate of five (5) pounds per cubic yard.

(2) Bifenthrin (Talstar Nursery Granular or Talstar T and O Granular (0.2)). Mix at the rate of 25 ppm or one-third (0.33) of a pound per cubic yard based on a potting media bulk density of 200.

(3) Tefluthrin (Fireban 1.5 G). Mix at the rate of 25 ppm based on a potting media bulk density of 400.

(D) Methyl Bromide Fumigation. Nursery stock: methyl bromide fumigation at NAP, chamber or tarpaulin. See the California Commodity Treatment Manual for authorized schedules.

(E) Other treatment or protocol not described herein may be submitted for review and approval to the Commissioner of Utah Department of Agriculture and Food.

(d) Detection Survey for Origin Certification. Japanese Beetle Harmonization Plan protocol not approved. Alternative approved protocol: States listed in the area under quarantine may have counties that are not infested with Japanese beetle. Shipments of commodities covered may be accepted from these noninfested counties if annual surveys are made in such counties and adjacent counties and the results of such surveys are negative for Japanese beetle. In addition, the plants must be greenhouse grown or contained in media that is sterilized and free of soil and the shipping nursery must grow all their own stock from seed, unrooted cuttings or bareroot material. A list of counties so approved will be maintained by the Utah Department of Agriculture and Food. Agricultural officials from a quarantined state or province may recommend a noninfested county be placed on the approved county list by writing for such approval and stating how surveys were conducted giving the following information:

- (A) Areas surveyed
- (B) How survey was carried out
- (C) Number of traps

(D) Results of survey

(E) History of survey

If a county was previously infested, give date of last infestation. If infestations occur in neighboring counties, approval may be denied. To be maintained on the approved list, each county must be reappraised every twelve (12) months. Shipments of commodities covered from noninfested counties will only be allowed entry into Utah if the uninfested county has been placed on the approved list prior to the arrival of the shipment in Utah. The certificate must have the following additional declaration: The plants in this consignment were produced in (name of county), state of (name of state of origin) that is known to be free of Japanese beetle.

(e) Privately owned house plants obviously grown, or certified at the place of origin as having been grown indoors without exposure to Japanese beetle may be allowed entry into this state without meeting the requirements of section (4). Contact the Utah Department of Agriculture and Food for requirements: Director, Plant Industry Division, Utah Department of Agriculture and Food, 350 North Redwood Road, P.O. Box 146500, Salt Lake City, Utah 84114-6500, FAX: (801) 538-7189, e-mail: UDAF-Nursery@utah.gov.

R68-15-6. Disposition of Violations.

Any or all shipments or lots of quarantined articles or commodities listed in R68-15-4 above arriving in Utah in violation of this quarantine shall immediately be sent out of the state, destroyed, or treated by a method and in a manner as directed by the Commissioner of the Utah Department of Agriculture and Food or his agent. Treatment shall be performed at the expense of the owner, or owners, or their duly authorized agent.

**KEY: quarantine
December 14, 2007
Notice of Continuation August 3, 2017**

**4-2-2
4-35-9**

R68. Agriculture and Food, Plant Industry.**R68-23. Utah Firewood Quarantine.****R68-23-1. Authority and Purpose.**

Promulgated under authority of 4-2-2 and 4-35-9, this rule is enacted to prevent the movement of invasive insects transported by firewood, including, but not limited to *Agrilus planipennis* (Emerald Ash Borer), *Anoplophora glabripennis* (Asian Longhorned Beetle), *Solenopsis invicta* (Red Imported Fire Ant).

R68-23-2. Definitions.

(1) "Department" means the Utah Department of Agriculture and Food.

(2) "Firewood" means any kindling, logs, timber, or other portions of a tree of any species four (4) feet or less in length, cut or split, or intended to be cut or split, into a form and size appropriate for use as fuel for fires in open pit, grill, fireplace, stove or other wood burning furnaces or devices in any form commonly used for burning in campfires, stoves or fireplaces.

(3) "Invasive insects" means any nonnative organisms that cause economic or environmental harm and are capable of spreading to new areas of the state.

(4) "Person" means any individual, organization, corporation, or partnership.

(5) "Sales By Package" means a package of firewood offered, exposed, or held for sale.

(6) "Sale From Bulk" means firewood offered, exposed, or held for sale which is not packaged.

R68-23-3. Area Under Quarantine.

(1) All areas of the United States and Canada that are declared high risk by the United States Department of Agriculture or Utah Commissioner of Agriculture and Food.

(2) The department shall keep an updated list of quarantine areas.

R68-23-4. Articles and Commodities Under Quarantine.

(1) This quarantine applies to all firewood offered, exposed, or held for sale in the State of Utah.

R68-23-5. Restrictions.

(1) All firewood transported, offered, exposed, or held for sale in the state shall be labeled in accordance with R68-23-6.

(2) A person may not transport, offer, expose, or hold for sale firewood from an area under quarantine in this state unless the firewood is treated in accordance with R68-23-7.

(3) Any person that transports or supplies firewood in this state for other than personal use shall maintain records, certificates, or other documents for two (2) years.

R68-23-6. Labeling Requirements.

(1) Each Sales By Package must bear a clear and conspicuous declaration of the following:

(a) identify the package as containing firewood, unless the contents can be easily identified through the wrapper or container;

(b) net quantity in terms of weight, measure, or count;

(c) name and address of the manufacturer, packer, or distributor of the firewood, if the package was not produced on the premises where they are offered, exposed, or held for sale; and

(d) origin of harvest identified by county or counties and state.

(2) Each Sale From Bulk must be accompanied by a delivery ticket containing the following information:

(a) name and contact information of the person who weighed or measured the firewood;

(b) date delivered;

(c) quantity delivered, by cords or cubic meters, including

fractions or count of individually wrapped packages delivered, if more than one is delivered;

(d) quantity on which the price is based, if different than the quantity delivered;

(e) identity of the type of firewood in the most descriptive terms commercially practicable; and

(f) origin of harvest by county or counties and state.

R68-23-7. Importation and Treatment.

(1) All firewood shall be prohibited entry into Utah from an area under quarantine unless the required certification is produced.

(2) Certification shall be issued by an authorized state agricultural official of the state of origin.

(3) The certificate shall bear the:

(a) name and address of the exporter of the firewood;

(b) name and address of the importer of the firewood;

(c) inspection/certificate date; and

(d) signature of authorized state agricultural officer.

(4) Such certificates shall be issued only if the shipment conforms to the heat treatment procedure listed below:

(a) the temperature of the center of the wood is raised to at least 160 deg F (71.1 deg C);

(b) the center temperature is maintained at 160 deg F (71.1 deg C) for at least 75 minutes;

(c) internal wood temperatures are obtained and verified by sensors located in the larger pieces of firewood at representative locations within the stack;

(d) sensors are placed in large firewood pieces in the coldest areas of the kiln as identified by the department;

(e) the full depth of the monitoring probes are placed in the wood;

(f) monitoring probes are sealed within the wood by a gasket, non-hardening putty, or similar material to prevent the probe reading ambient air temperature rather than the temperature of the wood;

(g) temperature monitoring equipment must be able to provide a record of the treatment that identifies each sensor and indicates time and temperature; and

(h) portable, stand-alone sensors, the temperature monitoring equipment (thermocouples, temperature data loggers, etc.) must be:

(i) accurate to within +/- 0.9 deg F (0.5 deg C) at the treatment temperature,

(ii) capable of collecting temperature data at least once every five (5) minutes; and

(iii) capable of recording or storing data for 30 days.

(5) The certifying official shall mail, FAX or e-mail a copy of the certificate to Director, Plant Industry Division, Utah Department of Agriculture and Food, 350 North Redwood Road, PO Box 146500, Salt Lake City, Utah 84114-6500, FAX: (801) 538-7189, e-mail: UDAF-insects@utah.gov.

(6) The exporter shall give advance notification of regulated firewood shipment to the department.

(7) The importer shall notify the department of the arrival of firewood imported under the provisions of this quarantine and shall hold such firewood for inspection.

(8) The department shall inspect or release the firewood within in 10 business days of delivery.

R68-23-8. Records.

(1) The records, certificates or other documents of a person who transports or supplies firewood for other than personal use shall include information regarding the source of the firewood, any treatment of the firewood and the disposition of the firewood.

(2) The records, certificates or other documents of a person that sells firewood shall include information regarding the source and supplier of the firewood.

(3) The department may inspect the records, certificates, documents, inventory, and facilities of a person that transports firewood or of a firewood supplier or seller at any time during reasonable business hours and may take samples of firewood for purposes of detecting invasive insects.

R68-23-9. Exemptions.

(1) Firewood harvested in areas other than those under quarantine are exempted from the treatment requirements in R68-23-7.

(2) The department may issue an exemption to the treatment for areas under quarantine upon request.

(3) Requests for an exemption shall be made to the department in writing and shall contain the:

(a) identity of the firewood importer;

(b) origin of harvest identified by county or counties and state; and

(c) type of wood to be imported.

(4) The department shall respond in writing within 10 business days of the request for an exemption.

(5) Exemptions are valid for a twelve (12) month period.

(6) The department may at any time revoke an exemption do to a change in the risk assessment.

(7) The department shall notify the firewood importer, in writing, identifying the reason(s) for the revocation.

R68-23-10. Enforcing Powers.

(1) Authorized agents of the department shall refuse admittance into Utah any firewood products that do not meet the provisions of this quarantine.

(2) Any shipment found within Utah in violation of this quarantine shall be treated to comply with this quarantine or be returned to the exporter at once.

R68-23-11. Violations and Penalties.

(1) Any fraudulent use of incorrect information on any forms used in the enforcement of this quarantine is a violation of this quarantine.

(2) Any intentional movement of firewood from an area under quarantine is a violation. Failure to perform or have inspection will constitute intentional movement as well as willfully moving property after notification.

(3) Failure to give advance notice to the department is a violation of this quarantine.

(4) Failure to comply with any provisions of this quarantine shall be a violation of this quarantine.

(5) Violators of this quarantine shall be subject to civil penalties of not more than \$5,000 per violation as defined in 4-2-15.

(6) Each improperly labeled, transported, or treated package or bulk sale shall be a separate violation of this rule.

KEY: firewood, quarantine, insects
August 3, 2017

4-2-2
4-35-9

R156. Commerce, Occupational and Professional Licensing.
R156-22. Professional Engineers and Professional Land Surveyors Licensing Act Rule.

R156-22-101. Title.

This rule is known as the "Professional Engineers and Professional Land Surveyors Licensing Act Rule".

R156-22-102. Definitions.

In addition to the definitions in Title 58, Chapters 1, 3a and 22, as used in Title 58, Chapters 1, 3a and 22, or this rule:

(1) "Complete and final", as used in Section 58-22-603, means "complete construction plans" as defined in Subsection 58-22-102(3).

(2) "Direct supervision", as used in Subsection 58-22-102(10), means "supervision" as defined in Subsection 58-22-102(16).

(3) "Employee, subordinate, associate, or drafter of a licensee", as used in Subsections 58-22-102(16), 58-22-603(1)(b) and this rule, means one or more individuals not licensed under this chapter, who are working for, with, or providing professional engineering, professional structural engineering, or professional land surveying services directly to and under the supervision of a person licensed under this chapter.

(4) "Engineering surveys", as used in Subsection 58-22-102(9), include all survey activities required to support the sound conception, planning, design, construction, maintenance, and operation of engineered projects, but exclude the surveying of real property for the establishment of land boundaries, rights-of-way, easements, alignment of streets, and the dependent or independent surveys or resurveys of the public land survey system.

(5) "Highly toxic materials", as used in Subsection 58-22-102(14)(a)(ii)(F), is as defined in the State Construction and Fire Codes adopted under Title 15A.

(6) "Incidental practice" means "architecture work as is incidental to the practice of engineering", as used in Subsection 58-22-102(9), and "engineering work as is incidental to the practice of architecture", as used in Subsection 58-3a-102(6), which:

(a) can be safely and competently performed by the licensee without jeopardizing the life, health, property and welfare of the public;

(b) is secondary and substantially less in scope and magnitude when compared to the work performed or to be performed by the licensee in the licensed profession;

(c) is work in which the licensee is fully responsible for the incidental practice performed as provided in Subsections 58-3a-603(1) or 58-22-603(1);

(d) unless exempt from licensure as provided in Subsection 58-22-305(1)(e), is work on a building classified for not greater than 49 occupants as determined in the State Construction and Fire Codes adopted under Title 15A;

(e) unless exempt from licensure as provided in Subsection 58-22-305(1)(e), is work included on a project with a construction value not greater than 15 percent of the overall construction value for the project including all changes or additions to the contracted or agreed upon work; and

(f) shall not include work on a building or related structure in an occupancy category of III or IV as defined in 1604.5 of the 2009 International Building Code.

(7) "Maximum allowable quantities", as used in Subsection 58-22-102(14)(a)(ii)(F), is quantities of hazardous materials as set forth in Section 307 of the 2009 International Building Code, Tables 307.1(1) and 307.1(2), which when exceeded, would classify the building, structure or portion thereof as Group H-1, H-2, H-3, H-4 or H-5 hazardous use.

(8) "NCEES FE", as used throughout this rule, means the National Council of Examiners in Engineering and Surveying

Fundamentals of Engineering Examination.

(9) "NCEES FS", as used throughout this rule, means the National Council of Examiners in Engineering and Surveying Fundamentals of Surveying Examination.

(10) "NCEES PE", as used throughout this rule, means the National Council of Examiners in Engineering and Surveying Principles and Practice of Engineering Examination.

(11) "NCEES PS", as used throughout this rule, means the National Council of Examiners in Engineering and Surveying Principles and Practice in Surveying Examination.

(12) "NCEES SE", as used throughout this rule, means the National Council of Examiners in Engineering and Surveying Structural Engineering Examination.

(13) "Professional structural engineering or the practice of structural engineering", as defined in Subsection 58-22-102(14), is further defined to exclude the design and oversight of the construction and installation of highway, utility, or pedestrian bridges.

(14) "Recognized jurisdiction", as used in Subsection 58-22-302(4)(d)(i), for licensure by endorsement, means any jurisdiction that is a member of the NCEES.

(15) "Responsible charge" by a principal, as used in Subsection 58-22-102(7), means that the licensee is assigned to and is personally accountable for the production of specified professional engineering, professional structural engineering or professional land surveying projects within an organization.

(16) "TAC/ABET" means Technology Accreditation Commission/Accreditation Board for Engineering and Technology (ABET, Inc.).

(17) "Under the direction of the licensee", as used in Subsection 58-22-102(16), as part of the definition of "supervision of an employee, subordinate, associate, or drafter of a licensee", means that the unlicensed employee, subordinate, associate, or drafter of a person licensed under this chapter engages in the practice of professional engineering, professional structural engineering, or professional land surveying only on work initiated by a person licensed under this chapter, and only under the administration, charge, control, command, authority, oversight, guidance, jurisdiction, regulation, management, and authorization of a person licensed under this chapter.

(18) "Unprofessional conduct" as defined in Title 58, Chapters 1 and 22, is further defined, in accordance with Subsection 58-1-203(1)(e), in Section R156-22-502.

R156-22-103. Authority - Purpose.

This rule is adopted by the Division under the authority of Subsection 58-1-106(1)(a) to enable the Division to administer Title 58, Chapter 22.

R156-22-104. Organization - Relationship to Rule R156-1.

The organization of this rule and its relationship to Rule R156-1 is as described in Section R156-1-107.

R156-22-302b. Qualifications for Licensure -- Education Requirements for Professional Engineer and Professional Structural Engineer.

In accordance with Subsections 58-22-302(1)(d) and 58-22-302(2)(d), the engineering program criteria is established as follows:

(1) The bachelors degree shall be earned from an engineering program accredited by EAC/ABET or the Canadian Engineering Accrediting Board (CEAB).

(2) The post-graduate degree shall be earned:

(a) from an engineering program accredited by EAC/ABET or the Canadian Engineering Accreditation Board (CEAB); or

(b) from an institution which offers a bachelors or masters degree in an engineering program accredited by EAC/ABET or CEAB in the same specific engineering discipline as the earned

post-graduate degree; and

(c) the applicant shall demonstrate that the combined engineering-related coursework taken meets or exceeds the engineering-related coursework required for an EAC/ABET-accredited bachelor degree program.

(3) If the degree was earned in a foreign country, the engineering curriculum shall be determined by the NCEES Credentials Evaluations to fulfill the required curricular content of the NCEES Engineering Education Standard.

(a) Engineering coursework deficiencies must be completed at an EAC/ABET-approved program; and

(b) all other coursework deficiencies may be satisfied at a recognized college or university approved by the Division in collaboration with the Board.

(4) A TAC/ABET accredited degree is not acceptable to meet the qualifications for licensure as a professional engineer or a professional structural engineer.

R156-22-302c. Qualifications for Licensure -- Education Requirements for Professional Land Surveyor.

In accordance with Subsection 58-22-302(3)(d), an applicant for licensure as a professional land surveyor shall verify completion of one of the following land surveying programs affiliated with an institution that is recognized by the Council for Higher Education Accreditation (CHEA), and approved by the Division in collaboration with the Board:

(1) an associates in applied science degree in land surveying or geomatics;

(2) a bachelors, masters or doctorate degree in land surveying or geomatics;

(3) an equivalent land surveying program that includes completion of a bachelors, masters or doctorate degree in a field related to land surveying or geomatics comprised of a minimum of 30 semester hours or 42 quarter hours of coursework in land surveying or geomatics which shall include completion of the following courses:

(a) a minimum of one course in each of the following content areas:

- (i) boundary law;
- (ii) writing legal descriptions;
- (iii) photogrammetry;
- (iv) public land survey system;
- (v) studies in land records or land record systems; and
- (vi) surveying field techniques; and

(b) the remainder shall be from any or all of the following content areas:

(i) algebra, calculus, geometry, statistics, trigonometry, not to exceed six semester hours or eight quarter hours;

(ii) control systems;

(iii) drafting, not to exceed six semester hours or eight quarter hours;

(iv) geodesy;

(v) geographic information systems;

(vi) global positioning systems;

(vii) land development; and

(viii) survey instrumentation; or

(4) an equivalent land surveying program that includes completion of a bachelors, masters or doctorate degree in a field related to land surveying or geomatics that does not include some of the coursework specified in Subsection (3) as part of the degree program, provided that the deficient requirements have been completed post-degree; and

(5) if the degree was earned in a foreign country, the land surveying curriculum shall be determined by the NCEES Credential Evaluations to fulfill the required curricular content of the NCEES Education Standard; deficiencies in coursework may be satisfied by completion at a recognized college or university approved by the Division in collaboration with the Board.

R156-22-302d. Qualifications for Licensure -- Experience Requirements for All Applicants.

In accordance with Subsection 58-22-302, the following general experience requirements are established for all applicants under this chapter, and are in addition to the specific experience requirements for each profession described in Sections R156-22-302e, R156-22-302f and R156-22-302g:

(1) 2,000 hours of work experience constitutes one year (12 months) of work experience.

(2) No more than 2,000 hours of work experience can be claimed in any 12 month period.

(3) Experience shall be progressive on projects that are of increasing quality and requiring greater responsibility.

(4) Only experience of an engineering, structural engineering or surveying nature, as appropriate for the specific license, is acceptable.

(5) Experience is not acceptable if it is obtained in violation of applicable statutes or rules.

(6) Unless otherwise provided in Section 7, experience shall be gained under the direct supervision of a person licensed in the profession for which the license application is submitted. Supervision of an intern by another intern is not permitted.

(7) Experience is also acceptable when obtained in a work setting where licensure is not required or is exempted from licensure in accordance with Section 58-22-305, including experience obtained in the armed services if:

(a) the experience is performed under the supervision of qualified persons and the applicant provides verifications of the credentials of the supervisor; and

(b) the experience gained is equivalent to work performed by an intern obtaining experience under a licensed supervisor in a licensed or civilian setting, and the applicant provides verification of the nature of the experience.

(8) Each supervisor shall provide to the applicant the certificate of qualifying experience with the supervisor's seal, which the applicant shall submit with the application for licensure.

(9) If the supervisor is unavailable or refuses to provide a certification of qualifying experience, the applicant shall submit:

(a) a complete explanation of why the supervisor is unavailable; and

(b) verification of the experience by alternative means acceptable to the Board, which shall demonstrate that the work was profession-related, competently performed, and sufficient accumulated experience for the applicant to be granted a license without jeopardy to the public health, safety, or welfare.

(10) If the supervisor verifying the applicant's credentials is not licensed in the profession, the supervisor shall provide a written explanation as to why the supervisor is qualified to verify the applicant's knowledge, ability and competence to practice in the profession applied for.

(11) Supervisor duties and responsibilities shall include the following:

(a) A person may not serve as a supervisor for more than one firm.

(b) A person who renders occasional, part time or consulting services to or for a firm may not serve as a supervisor.

(c) The supervisor shall be in responsible charge of the projects assigned, and professionally responsible for the acts and practices of the supervisee.

(d) The supervision shall be conducted in a setting in which the supervisor is independent from control by the supervisee and in which the ability of the supervisor to supervise and direct the practice of the supervisee is not compromised.

(e) The supervisor shall be available for advice, consultation, and direction consistent with the standards and ethics of the profession.

(f) The supervisor shall provide periodic review of the work assigned to the supervisee.

(g) The supervisor shall monitor the performance of the supervisee for compliance with laws, standards and ethics applicable to the profession.

(h) The supervisor shall provide supervision only to a supervisee who is an employee of a licensed professional or alternatively in a setting wherein both the supervisor and the supervisee are engaged in a work setting in which the work is exempt from licensure requirements.

(i) The supervisor shall submit appropriate documentation to the Division with respect to all work completed by the supervisee during the period of supervised experience, including the supervisor's evaluation of the supervisee's competence to practice in the profession.

(j) The supervisor shall ensure that each supervisee has obtained the degree which is a prerequisite to obtaining the qualifying experience.

R156-22-302e. Qualifications for Licensure -- Experience Requirements - Specific to Professional Engineer.

In accordance with Subsection 58-22-302(1)(e), each applicant for licensure as a professional engineer shall submit verification of qualifying experience as follows:

(1) The experience shall be:

(a) obtained after meeting the education requirement;

(b) supervised by one or more licensed professional engineers;

(c) certified by the licensed professional engineer who provided the supervision; and

(d) include a minimum of four years of full-time or substantially equivalent part-time experience in professional engineering, except as provided in Subsection (2).

(2) Credit toward meeting the experience requirement may be granted as follows:

(a) A maximum of three years for teaching advanced engineering subjects in a college or university offering an engineering curriculum accredited by EAC/ABET.

(b) A maximum of three years for conducting research in a college or university offering an engineering curriculum accredited by EAC/ABET, provided the research is:

(i) under the supervision of a licensed professional;

(ii) directly related to the practice of engineering; and

(iii) has not been credited towards the education requirements, such as part of classwork, thesis or dissertation, or similar work.

(c) A maximum of one year for completing a masters degree in engineering provided that both the earned bachelors and masters degree in engineering meet the program criteria set forth in Section R156-22-302b.

(d) A maximum of two years for completing a doctorate degree in engineering provided that both the earned bachelors or masters degree and doctorate degree in engineering meet the program criteria set forth in Section R156-22-302b.

(3) The performance or supervision of construction work as a contractor, foreman or superintendent is not qualifying experience for licensure as a professional engineer.

(4) Experience shall demonstrate knowledge, application, and practical solutions using engineering mathematics, physical and applied science, properties of materials, and the fundamental principles of engineering design.

R156-22-302f. Qualifications for Licensure -- Experience Requirements -- Specific to Professional Structural Engineer.

In accordance with Subsection 58-22-302(2)(e), each applicant for licensure as a professional structural engineer shall submit verification of qualifying experience as follows:

(1) The experience shall be:

(a) obtained after meeting the education requirement;

(b) supervised by one or more licensed professional structural engineers;

(c) certified by the licensed professional structural engineer who provided the supervision; and

(d) include a minimum of three years of full-time or equivalent part-time experience in professional structural engineering.

(2) Professional structural engineering experience shall include responsible charge of structural design in one or more of the following areas:

(a) structural design of any building or structure two stories and more, or 45 feet in height, located in a region of moderate or high seismic risk, designed in accordance with current codes adopted pursuant to Section 58-56-4;

(b) structural design for a major seismic retrofit/rehabilitation of an existing building or structure located in a region of moderate or high seismic risk; or

(c) structural design of any other structure of comparable structural complexity.

(3) Professional structural engineering experience shall include structural design in all of the following areas:

(a) use of three of the following four materials as they relate to the design, rehabilitation or investigation of buildings or structures:

(i) steel;

(ii) concrete;

(iii) wood; or

(iv) masonry;

(b) selection of framing systems including the consideration of alternatives and the selection of an appropriate system for the interaction of structural components to support vertical and lateral loads;

(c) selection of foundation systems including the consideration of alternatives and the selection of an appropriate type of foundation system to support the structure;

(d) design and detailing for the transfer of forces between stories in multi-story buildings or structures;

(e) application of lateral design in the design of the buildings or structures, in addition to any wind design requirements; and

(f) application of the local, state, and federal code requirements as they relate to design loads, materials, and detailing.

R156-22-302g. Qualifications for Licensure -- Experience Requirements -- Specific to Professional Land Surveyor.

In accordance with Subsection 58-22-302(3)(d), each applicant for licensure as a professional land surveyor shall submit verification of qualifying experience as follows:

(1) The experience may be obtained before, during, or after completing the education requirement.

(2) The experience shall be supervised by one or more licensed professional land surveyors, and certified by the supervisor.

(3) The experience shall include experience in professional land surveying in the following content areas:

(a) experience specific to field surveying with actual "hands on" surveying, including all of the following:

(i) operation of various instrumentation;

(ii) review and understanding of plan and plat data;

(iii) public land survey systems;

(iv) calculations;

(v) traverse;

(vi) staking procedures;

(vii) field notes and manipulation of various forms of data encountered in horizontal and vertical studies; and

(b) experience specific to office surveying, including all of the following:

(i) drafting (including computer plots and layout);

- (ii) reduction of notes and field survey data;
 - (iii) research of public records;
 - (iv) preparation and evaluation of legal descriptions; and
 - (v) preparation of survey-related drawings, plats, and record of survey maps.
- (c) The amount of qualifying experience shall be as follows:
- (1) Each applicant with an associates degree in land surveying or geomatics shall complete a minimum of six years of experience as follows:
 - (a) three years that complies with Subsection (3)(a); and
 - (b) three years that complies with Subsection (3)(b).
 - (2) Each applicant with a bachelors degree in land surveying or geomatics shall complete a minimum of four years of experience as follows:
 - (a) two years that complies with Subsection (3)(a); and
 - (b) two years that complies with Subsection (3)(b).
 - (3) Each applicant with a masters degree in land surveying or geomatics shall complete a minimum of three years of experience as follows:
 - (a) one and a half years that complies with Subsection (3)(a); and
 - (b) one and a half years that complies with Subsection (3)(b).
 - (4) Each applicant with a doctorate degree in land surveying or geomatics shall complete a minimum of two years of experience as follows:
 - (a) one year that complies with Subsection (3)(a); and
 - (b) one year that complies with Subsection (3)(b).

R156-22-302h. Qualifications for Licensure -- Examination Requirements for Professional Engineer.

In accordance with Subsection 58-22-302(1)(f), the examination requirements for licensure as a professional engineer are defined, clarified, or established as the following:

- (1) the NCEES FE examination with a passing score as established by the NCEES except that an applicant who has completed one of the following is not required to pass the FE examination:
 - (a) a Ph.D. or doctorate degree in engineering from an institution that offers EAC/ABET undergraduate programs in the Ph.D. field of engineering; or
 - (b) a Ph.D. or doctorate degree in engineering from a foreign institution if the engineering curriculum is determined by the NCEES Credentials Evaluations to fulfill the required curricular content of the NCEES Engineering Education Standard.
- (2) the NCEES PE examination with a passing score as established by the NCEES; or
- (3) the NCEES SE examination with a passing score as established by the NCEES.
- (4) If an applicant for reinstatement of licensure as a professional engineer passed the examinations required for licensure as an engineer under prior Utah statutes and rules, the prior examinations will be acceptable to qualify for reinstatement of licensure rather than the examinations specified under Subsection R156-22-302h(1).
- (5) Prior to registering directly with NCEES to sit for the NCEES PE examination, an applicant shall:
 - (a) complete the education requirements set forth in Subsection R156-22-302b; and
 - (b) provide verification to NCEES of passing the NCEES FE examination.
- (6) The admission criteria to sit for the NCEES FE examination is set forth in Section 58-22-306.
- (7) In accordance with Subsection 58-22-302(4)(d)(ii), an applicant for licensure as a professional engineer by endorsement shall comply with the examination requirements in Subsection R156-22-302h, except that the Board may waive one

or more of the following:

- (a) the NCEES FE examination, for an applicant who:
 - (i) is a principal for five of the last seven years preceding the date of the license application; and
 - (ii) was not required to pass the NCEES FE examination for initial licensure from the recognized jurisdiction the applicant was originally licensed;
- (b) the NCEES PE examination for an applicant who:
 - (i) has been a principal for five of the last seven years preceding the date of the license application;
 - (ii) has been licensed for ten years preceding the date of the license application; and
 - (iii) was not required to pass the NCEES PE examination for initial licensure from the recognized jurisdiction the applicant was originally licensed.

R156-22-302i. Qualifications for Licensure -- Examination Requirements for Professional Structural Engineer.

In accordance with Subsection 58-22-302(2)(f), the examination requirements for licensure as a professional structural engineer are defined, clarified, or established as the following:

- (1) the NCEES FE examination with a passing score as established by the NCEES; and one of the following:
 - (a) the NCEES SE examination with a passing score as established by the NCEES;
 - (b) the NCEES Structural I and Structural II Examinations with a passing score as established by the NCEES;
 - (c) an equivalent 16-hour state written examination with a passing score; or
 - (d) the NCEES Structural II exam and an equivalent 8-hour state written examination with a passing score.
- (2) Prior to registering directly with NCEES to sit for the NCEES SE examination, an applicant shall:
 - (a) complete two out of the three years of the experience requirements set forth in Subsection R156-22-302f; and
 - (b) provide verification to NCEES of passing the NCEES FE examination.
- (3) An applicant for licensure as a professional structural engineer by endorsement shall comply with the examination requirements in Subsection R156-22-302i, except that the Board may waive the NCEES FE examination for an applicant who:
 - (a) has been a principal for five of the last seven years preceding the date of the license application; and
 - (b) was not required to pass the NCEES FE examination for initial licensure from the recognized jurisdiction the applicant was originally licensed.

R156-22-302j. Qualifications for Licensure -- Examination Requirements for Professional Land Surveyor.

In accordance with Subsection 58-22-302(3)(e), the examination requirements for licensure as a professional land surveyor are defined, clarified, or established as the following:

- (1) the NCEES FS examination with a passing score as established by the NCEES;
- (2) the NCEES PS examination with a passing score as established by the NCEES; and
- (3) the Utah Professional Land Surveyor Examination, with a passing score of at least 75%.
- (4) An applicant who fails the Utah Professional Land Surveyor Examination may retake the examination:
 - (a) no sooner than 30 days following any failure, up to three failures; and
 - (b) no sooner than six months following any failure thereafter.
- (5) Prior to registering directly with NCEES to sit for the NCEES PS examination, an applicant shall:
 - (a) complete the education requirement set forth in Section R156-22-302c; and

(b) provide verification to NCEES of passing the NCEES FS examination.

(6) An applicant for licensure as a professional land surveyor by endorsement shall comply with the examination requirements in Section R156-22-302j, except that the Board may waive either the NCEES FS examination or the NCEES PS examination, or both, for an applicant who:

(a) has been a principal for five of the last seven years preceding the date of the license application; and

(b) was not required to pass the NCEES FS examination or the NCEES PS examination for initial licensure from the recognized jurisdiction the applicant was originally licensed.

R156-22-304. Continuing Education for Professional Engineers, Professional Structural Engineers, and Professional Land Surveyors.

In accordance with Subsection 58-22-303(2) and Section 58-22-304, the qualifying continuing professional education standards for professional engineers, professional structural engineers and professional land surveyors are established as follows:

(1) During each two-year period ending on March 31 of each odd numbered year, a licensed professional engineer, professional structural engineer, and professional land surveyor shall complete at least 30 hours of qualified professional education directly related to the ethics, business and technical content aimed at maintaining, improving, or expanding the skills and knowledge relevant to the licensee's professional practice.

(2) The required hours of professional education for an individual who first becomes licensed during the two-year period shall be decreased in a pro-rata amount equal to any part of that two year period preceding the date on which that individual first became licensed.

(3) Qualified continuing professional education under this section shall:

(a) have an identifiable clear statement of purpose and defined objective for the educational program directly related to the licensee's professional practice;

(b) be relevant to the licensee's professional practice;

(c) be presented in a competent, well organized and sequential manner consistent with the stated purpose and objective of the program;

(d) be prepared and presented by individuals who are qualified by education, training and experience; and

(e) have a competent method of registration of individuals who actually completed the education program, with records of registration and completion available for review.

(4) Credit for qualified continuing professional education shall be recognized as follows:

(a) unlimited hours for each hour of professional education completed in blocks of time of not less than 50 minutes, in formally established classroom courses, seminars, or conferences;

(b) a maximum of 15 hours for teaching in a college or university or for teaching qualified continuing professional education courses in the field of professional engineering, professional structural engineering or professional land surveying, provided it is the first time the material has been taught during the preceding 12 months;

(c) a maximum of five hours for preparation of papers, articles, or books directly related to the practice of professional engineering, professional structural engineering, or professional land surveying and submitted for publication; and

(d) a maximum of ten hours for service on committees or in leadership roles in any state, national or international organization for the development and improvement of the profession of professional engineering, professional structural engineering, or professional land surveying but no more than five of the ten hours may be obtained from such activity in any

one organization;

(e) unlimited hours for continuing education provided via Internet or through home study courses provided the course verifies registration and participation in the course by means of a test which demonstrates that the participant has learned the material.

(5) A licensee shall maintain records of completed qualified continuing professional education for a period of four years after close of the two-year period to which the records pertain. It is the responsibility of the licensee to maintain information with respect to qualified continuing professional education to demonstrate it meets the requirements of this section.

(6) If a licensee exceeds the 30 hours of qualified continuing professional education during the two-year period, the licensee may carry forward a maximum of 15 hours into the next two-year period.

(7) Any licensee who fails to timely complete the continuing education required by this rule shall be required to complete double the number of hours missed to be eligible for renewal or reinstatement of licensure.

(8) Any applicant for reinstatement who was not in compliance with the continuing education requirement at the time of the expiration of licensure shall be required to complete 30 hours of continuing education within two years prior to the date of application for reinstatement of licensure.

(9) The Division may waive continuing education in accordance with Section R156-1-308d.

R156-22-305. Inactive Status.

(1) The requirements for inactive licensure specified in Subsection R156-1-305(3) shall also include certification that the professional engineer, professional structural engineer or professional land surveyor licensee shall not engage in the profession for which the license was issued while the license is on inactive status, except to identify the individual as an inactive licensee.

(2) A license shall be active and in good standing prior to being placed on inactive status.

(3) Inactive status licensees are not required to fulfill the continuing education requirement.

(4) In addition to the requirements in Subsection R156-1-305(6) to reactivate an inactive license, a licensee shall provide documentation that the licensee, within two years of the license being reactivated, completed 30 hours of continuing education.

(5) Prior to a license being reactivated, a licensee shall meet the requirements for license renewal.

R156-22-502. Unprofessional Conduct.

"Unprofessional conduct" includes:

(1) submitting an incomplete final plan, specification, report or set of construction plans to:

(a) a client, when the licensee represents, or could reasonably expect the client to consider the plan, specification, report or set of construction plans to be complete and final; or

(b) to a building official for the purpose of obtaining a building permit;

(2) failing as a principal to exercise responsible charge;

(3) failing as a supervisor to exercise supervision of an employee, subordinate, associate or drafter;

(4) receiving gratuities from material, product, or services suppliers for specifying or endorsing their goods or services;

(5) failing to fully disclose and obtain consent in writing of the principal employer and all interested parties prior to accepting or engaging in supplemental professional engineering, structural engineering, or land surveying services; and

(6) failing to conform to the accepted and recognized standards and ethics of the profession, including those established in the "Rules of Professional Conduct", as published

in the NCEES Model Rules, revised August 2016, which is hereby incorporated by reference.

R156-22-503. Administrative Penalties.

(1) In accordance with Subsection 58-22-503, the following fine schedule shall apply to citations issued under Title 58, Chapters 1 and 22:

TABLE
FINE SCHEDULE

Violation	First Offense	Second Offense
58-1-501(1)(a)	\$1,000.00	\$2,000.00
58-1-501(1)(b)	\$1,000.00	\$2,000.00
58-1-501(1)(c)	\$1,000.00	\$2,000.00
58-1-501(1)(d)	\$1,000.00	\$2,000.00
58-1-501(1)(e)	\$1,000.00	\$2,000.00
58-1-501(2)(a)	\$1,000.00	\$2,000.00
58-1-501(2)(b)	\$1,000.00	\$2,000.00
58-1-501(2)(c)	\$ 800.00	\$1,600.00
58-1-501(2)(d)	\$ 250.00	\$ 500.00
58-1-501(2)(e)	\$ 800.00	\$1,600.00
58-1-501(2)(f)	\$ 800.00	\$1,600.00
58-1-501(2)(g)	\$1,000.00	\$2,000.00
58-1-501(2)(h)	\$1,000.00	\$2,000.00
58-1-501(2)(i)	\$1,000.00	\$2,000.00
58-1-501(2)(j)	\$1,000.00	\$2,000.00
58-1-501(2)(k)	\$1,000.00	\$2,000.00
58-1-501(2)(l)	\$1,000.00	\$2,000.00
58-1-501(2)(o)	\$1,000.00	\$2,000.00
58-22-501(1)	\$ 800.00	\$1,600.00
58-22-501(2)	\$ 800.00	\$1,600.00
58-22-501(3)	\$ 800.00	\$1,600.00
58-22-501(4)	\$ 800.00	\$1,600.00
58-22-501(5)	\$ 800.00	\$1,600.00
58-22-502.5	\$1,000.00	\$2,000.00

(2) Citations shall not be issued for third offenses, except in extraordinary circumstances approved by the investigative supervisor. If a citation is issued for a third offense, the fine is double the second offense amount, with a maximum amount not to exceed the maximum fine allowed under Subsection 58-22-503(1)(i).

(3) If multiple offenses are cited on the same citation, the fine shall be determined by evaluating the most serious offense.

(4) An investigative supervisor may authorize a deviation from the fine schedule based upon the aggravating or mitigating circumstances.

(5) In all cases the presiding officer shall have the discretion, after a review of the aggravating and mitigating circumstances, to increase or decrease the fine amount based upon the evidence reviewed.

R156-22-601. Seal Requirements.

(1) In accordance with Section 58-22-601, all final plans, specifications, reports, maps, sketches, surveys, drawings, documents and plats prepared by the licensee or prepared under the supervision of the licensee, shall be sealed in accordance with the following:

(a) Each seal shall be a circular seal, 1-1/2 inches minimum diameter.

(b) Each seal shall include the licensee's name, license number, "State of Utah", and, as appropriate, "Professional Engineer", "Professional Structural Engineer", or "Professional Land Surveyor".

(c) Each seal shall be signed and dated with the signature and date appearing across the face of each seal imprint.

(d) Each original set of final plans, specifications, reports, maps, sketches, surveys, drawings, documents and plats, as a minimum, shall have the original seal imprint, original signature and date placed on the cover or title sheet.

(e) A seal may be a wet stamp, embossed, or electronically produced.

(f) Electronically generated signatures are acceptable.

(g) It is the responsibility of the licensee to provide

adequate security when documents with electronic seals and electronic signatures are submitted. Sheets subsequent to the cover of specifications are not required to be sealed, signed and dated.

(h) Copies of the original set of plans, specifications, reports, maps, sketches, surveys, drawings, documents and plats which contain the original seal, original signature and date is permitted, if the seal, signature and date is clearly recognizable.

(2) A person who qualifies for and uses the title of professional engineer intern is not permitted to use a seal.

KEY: professional land surveyors, professional engineers, professional structural engineers

August 21, 2017

Notice of Continuation May 30, 2017

58-22-101

58-1-106(1)(a)

58-1-202(1)(a)

R251. Corrections, Administration.**R251-305. Visiting at Community Correctional Centers.****R251-305-1. Authority and Purpose.**

(1) This rule is authorized by Sections 63G-3-201, 64-13-10, and 64-13-17, of the Utah Code.

(2) The purpose of this rule is to provide the Department's rules governing visitation at Community Correctional Centers.

R251-305-2. Definitions.

(1) "Center" means a community corrections halfway house facility designed to facilitate an offender's readjustment to private life.

(2) "Confiscate" means to take possession or immediately seize.

(3) "Contraband" means any material, substance or other item not approved by the Department to be in the possession of residents.

(4) "Evidence" means any item which may be used in prosecution of a violation of Department policy or procedure, federal, state or local law.

(5) "Illegal contraband" means any material, substance or other item the possession of which violates criminal statutes.

(6) "Legal representatives" means court personnel, attorneys-at-law and their assistants such as paralegals and investigators.

(7) "Offender" means a probationer, parolee or inmate housed in a Community Correctional Center.

(8) "Premises" means Center's building and land, including residents' property, rooms, persons and vehicles.

(9) "Religious representative" means a priest, bishop, rabbi, religious practitioner or similar functionary of a church or legally recognized denomination or organization.

(10) "Sponsor" means an individual who is approved by Center staff members to accompany an offender while on leave time away from the Center.

(11) "Visit" means a period of time during which an offender has the opportunity to interact with family and friends on Community Correctional Center premises.

R251-305-3. Policy.

It is the policy of the Department that:

(1) Community Correctional Centers shall schedule days and times for visiting;

(2) visits at other than established visiting hours may be approved by the Center Director/designee;

(3) Community Correctional Centers shall have designated visiting areas;

(4) visitors shall not be allowed in unauthorized areas;

(5) offenders' visitors, except for non-emancipated minors, shall be approved sponsors;

(6) non-emancipated minors shall be accompanied by a parent or guardian;

(7) sponsor applicants may be subject to special conditions (i.e., visiting only, leave time only, etc.);

(8) offenders shall be advised of visiting rules during orientation;

(9) visitors will be advised of visiting rules during the sponsor application process;

(10) visiting may be prohibited for offenders in security cells and as part of restrictions ordered by the Offender Discipline Hearing Officer;

(11) visitors shall be required to sign a visitor log when entering and leaving the Center;

(12) visitors may be required to present picture identification prior to visiting;

(13) visitors are to be appropriately attired per staff discretion (i.e. modest attire, no gang-affiliated attire or accessories, etc.);

(14) sexual contact between visitors and offenders (i.e.,

petting, prolonged kissing or bodily contact) is prohibited;

(15) visitors shall not bring animals or pets into the Center with the exception of dogs trained to aid individuals with disabilities;

(16) visitors shall visit with only one offender at a time unless approved by Center staff;

(17) offenders and visitors shall not exhibit abusive, disruptive or other inappropriate behavior;

(18) offenders and visitors shall not use loud or offensive language;

(19) visitors suspected to be under the influence of alcohol or drugs shall be denied visiting and advised by staff to arrange alternate transportation if they are operating a vehicle;

(20) if an intoxicated visitor refuses to seek alternate transportation or becomes belligerent, staff shall attempt to detain the individual and contact the local law enforcement for assistance;

(21) visitors shall be responsible for their property and the Department shall not be liable for any loss or damage to visitors' property;

(22) visitors may be subject to search of their person or property for reasonable cause;

(23) visitors attempting to bring contraband on Center premises may have visiting privileges restricted, suspended or revoked;

(24) Center staff may restrict, deny or cancel visiting privileges for the safety, security and orderly operation of the Center or program requirements;

(25) offenders may be prohibited contact with individuals as determined by the court, Board of Pardons and Parole, or Center program requirements; and

(26) an appeal process shall be available to challenge denial or restriction of visiting privileges.

KEY: corrections, visitation**August 15, 2017****Notice of Continuation April 5, 2017****64-13-17**

R251. Corrections, Administration.**R251-706. Inmate Visiting.****R251-706-1. Authority and Purpose.**

(1) This rule is authorized by Sections 63G-3-201, 64-13-10 and 64-13-17, of the Utah Code.

(2) The purpose of this rule is to provide the Department's policies, procedures and requirements for inmate visitation at the Division of Prison Operations.

R251-706-2. Definitions.

(1) "abusive" means insulting or harmful.
 (2) "adult" means anyone eighteen years of age or older.
 (3) "approved adult" means an individual eighteen years of age or older, cleared through background checks and approved by the facility visiting staff to visit an inmate.

(4) "approved visitor" means an individual cleared through BCI and approved by the facility visiting staff to visit an inmate.

(5) "barrier visit" means a non-contact visit where the visitor and inmate are separated by glazing, screen, or other partition.

(6) "BCI" means Bureau of Criminal Identification.

(7) "contraband, illegal" means any item in the possession of an inmate or visitor which violates a federal or state law.

(8) "contraband, nuisance" means any item in the possession of an inmate or visitor which does not violate a federal or state law but does violate a prison policy.

(9) "DPO" means Division of Prison Operations.

(10) "DMV" means Department of Motor Vehicles.

(11) "emergency visit" means visit occasioned by a verifiable emergency, such as serious illness, accident, or death of an inmate's immediate family member.

(12) "foul" means offensive to the senses; vulgar.

(13) "immediate family" means spouse, children, stepchildren, mother, father, brother, sister, mother-in-law, father-in-law, sister-in-law, brother-in-law, step-mother, step-father, step-brother, step-sister, half-brother, half-sister, grandmother, grandfather and grandchildren.

(14) "inmate visiting request form" means a form given to inmates during the Reception and Orientation process or at a later time to add persons to their approved visitor lists.

(15) "Minor" means any person under the age of 18 years old.

(16) "NCIC" means National Crime Information Center.

(17) "NLETS" means National Law Enforcement Teletype System.

(18) "OMR" means Offender Management Review team.

(19) "positive identification" means document containing a photograph and date of birth, including but not limited to a valid driver's license, federal or state identification card, military identification or passport; does not include credit cards, social security card, employment card, or student identification card.

(20) "R and O" means reception and orientation process for new inmates and parole violators committed to the institution.

(21) "special visits" means visits authorized by the warden/designee for circumstances other than normal visiting procedures.

(22) "UDC" means Utah Department of Corrections.

(23) "Uinta" means housing unit for maximum security inmates.

(24) "USP" means Utah State Prison, including Draper and CUCF.

(25) "visit" means a short meeting with an approved visitor; a privilege, not a right, afforded to inmates/visitors at the Utah State Prison.

(26) "visitor's consent form" means a form given to an approved visitor requiring the visitor's signature indicating that the visitor has received, understands, and shall adhere to the visitor rules.

R251-706-3. Visiting Policies.

(1) Visitors shall complete a visitor's consent form prior to the initial visit.

(2) Visitors shall receive a copy of the visitor rules and regulations which are distributed at the time of the initial visit. Prior to the first visit, visitors shall read the rules and regulations and shall sign that they understand and will comply with the visiting rules.

(3) Any employee, contractor, volunteer or student who has terminated employment or services with the Department may not be cleared for visits until one year has elapsed from the time of termination of employment or services.

(4) Visitors are to be appropriately attired per staff discretion (i.e. modest attire, no gang-affiliated attire or accessories, etc.).

(5) Upon reasonable suspicion, visitors shall be subject to search, and visitation may be denied for failure to submit to the search request.

(6) Prior to entering the Utah State Prison visiting room, visitors may be screened with a metal detector.

(7) If contraband is discovered, the duty officer shall be notified, and:

(a) visitors attempting to introduce nuisance contraband, which is in violation of DPO policies and procedures, onto prison property may have their visiting privileges suspended, restricted or revoked; or

(b) visitors attempting to introduce illegal contraband onto prison property may be subject to criminal prosecution and suspension of visiting privileges.

(8) Visitors shall not be permitted to bring pets or other animals, except for seeing-eye dogs, onto prison property.

(9) Food items from outside the prison shall not be allowed.

(10) Visits should not exceed two hours. Visiting hours may be reduced or extended on any day based on facility visiting conditions or special holiday schedules. On special visits, conditions including the length of the visit are approved based on an assessment of the request and capabilities of the facility.

(11) Personal property such as purses, wallets, keys, blankets, coats and sweaters worn as outer garments, and money (except for vending machine change in facilities which allow them) are not allowed in the visiting room.

(12) Visitors with babies may bring into the visiting area infant care items that are reasonably needed during the visit. Staff shall accommodate personal need items that do not present a threat to the safety and security of the inmates, staff, and the institution.

(13) The UDC shall not be responsible for loss of personal property. Visitors may secure items in UDC lockers where available.

(14) Visitors shall not be permitted to visit during any scheduled visiting period if less than 30 minutes remain in the visiting period.

R251-706-4. Uinta Visiting.

Visitors to the Uinta facility may be required to have additional clearances by the warden/designee or unit manager, prior to visiting the facility.

R251-706-5. Processing Visiting Application.

(1) A visiting application shall be completed by inmates who wish to have a visitor. It is the inmate's responsibility to ensure that the visiting application information is complete and approved by facility visiting staff prior to the first visit.

(2) Visiting applications shall be checked by facility visiting staff through BCI, NLETS, DMV and local wants and warrants prior to the applicant being considered for visitation privileges.

(3) Visiting applications shall be denied by the captain/designee if there is reason to believe that visits would jeopardize the safety, security, management or control of the Institution.

(4) Applications may be denied when an extensive or recent history of criminal activity exists, or the visitor has:

- (a) transported contraband into or out of a correctional facility;
- (b) aided or attempted to aid in an escape from a jail or correctional facility;
- (c) been a crime partner of the inmate applicant; or
- (d) been under the supervision of UDC for a felony offense.

(5) Visiting application denials may be challenged by visitor applicants through the deputy warden/designee. If the visitor applicant is not satisfied with the deputy warden/designee decision, a second appeal may be made to the warden/designee.

(6) Except for spouses, visitors under 18 years of age shall be accompanied by their parent or legal guardian on the inmate's approved visiting list.

(7) Visitors 16 years of age and older shall present positive identification prior to being permitted to visit.

(8) An individual may not be on more than one inmate's visiting list unless that individual is a member of the immediate family of all inmates involved and is approved as a visitor by the warden/designee.

(9) Adoptions, marriages, or other methods of claiming legal relationships, performed for the purpose of circumventing existing visiting policies shall be considered invalid.

(10) Visitors may have their names removed from any visiting list by sending a written request to the facility visiting staff.

(11) Visitors removed from a visiting list at the written request of an inmate or visitor shall not be reinstated for a 90-day period without prior approval of the facility visiting staff.

(12) Except for members of the inmate's immediate family, only one single adult visitor of the opposite sex shall be permitted to be on the visiting list of any one inmate at any given time.

(13) Divorced visitors shall provide proof of divorce to the facility visiting staff before being allowed to visit an inmate of the opposite sex.

(14) Except for members of the inmate's immediate family, married persons visiting inmates of the opposite sex shall be accompanied by one or more of the following, who shall remain with the visitor for the duration of the visit:

- (a) visitor's spouse who is on approved visiting list;
- (b) inmate's spouse;
- (c) inmate's parent or
- (d) other persons approved by the facility visiting staff.

R251-706-6. Visitor Suspensions.

(1) A visit may be suspended, restricted or revoked for dress code violation, foul and abusive language/conduct, or refusal to comply with DPO policies or procedures, or when necessary to meet safety, security, management or control requirements of the Utah State Prison.

(2) The facility visiting staff may suspend, restrict or revoke visits if the behavior of the visitor or inmate jeopardizes the safety, security, management or control of the institution.

(3) If a visit is suspended, restricted, or revoked the facility visiting staff shall document the action by providing notification of the rules infraction to the inmate, visitor, inmate's OMR, and duty officer. The inmate's OMR may review the documentation and make decisions regarding visiting to the visiting staff members for modification of the suspension, restriction, or revocation. The inmate may appeal suspensions, restrictions, or revocations by submitting a written request to the warden/designee.

(4) Visiting privileges may be permanently revoked or altered as follows:

(a) visitors who bring drugs into the institution may be permanently barred from visiting; and

(b) inmates guilty of attempting to introduce drugs, weapons or contraband money to the institution through the visiting process may be placed on barrier visits.

(5) Barrier visits may be required for inmates when:

(a) visitors have not been in compliance with visiting regulations on prior occasions and have been warned or required to leave the visiting area;

(b) inmates are classified as Level 1 or 2;

(c) inmates or visitors have been suspected or attempted to introduce contraband into a correctional facility;

(d) inmates have been convicted of disciplinary infraction A13 (Possession, introduction or use of any unauthorized intoxicants, unauthorized drugs or drug paraphernalia, positive urinalysis, breath analysis, blood test, or refusal to submit to the same; or

(e) inmate or visitor behavior, or a recent history of behavior is a threat to the safety and security of the inmates, visitors, staff and the institution.

R251-706-7. Sex Offender Visiting.

(1) Inmates identified as sex offenders by R and O or visiting staff members may be restricted from visits with minors as follows:

(a) inmates shall not visit with minors identified as the victim of the inmate;

(b) inmates with a documented history of sexual misconduct with a child under the age of 18 years shall not visit with any minor while incarcerated;

(c) court orders or Board of Pardons and Parole orders regarding contact or non-contact between inmates and minors will be enforced;

(d) inmates may appeal visiting restrictions with minors by written appeal to the warden/designee; or

(e) visits between inmates and minors for therapeutic or clinical reasons may be approved on an individual visit basis by the warden/designee.

R251-706-8. Special Visits.

Requests for special visits or emergency visits from individuals not on an approved visiting list may be approved or denied for reasonable cause by the warden/designee.

KEY: corrections, prisons, inmates, inmate visiting

August 15, 2017

Notice of Continuation April 6, 2017

63G-3-201

64-13-10

64-13-17

R277. Education, Administration.**R277-101. Public Participation in Utah State Board of Education Meetings.****R277-101-1. Authority and Purpose.**

(1) This rule is authorized by:
 (a) Utah Constitution, Article X, Section 3, which vests general control and supervision over public education in the Board;

(b) Title 52, Chapter 4, Open and Public Meetings Act, which directs that the deliberations and actions of the Board be conducted openly; and

(c) Section 53A-1-401, which allows the Board to make rules to execute the Board's duties and responsibilities under the Utah Constitution and state law.

(2) The purpose of this rule is to describe procedures to be followed by the Board in its conduct of the public's business in order to:

(a) hear from those who desire to be heard on public education matters in the state;

(b) effectively and efficiently utilize the time of the Board; and

(c) balance desire for public information with other demands on the Board's time.

R277-101-2. Definitions.

"Chair" means:

(1) the duly elected Chairperson of the Board;

(2) a Vice-chair when conducting a meeting of the Board;

or

(3) the Chair of a Board standing committee.

R277-101-3. Public Participation.

(1) The general public may attend meetings of the Board, unless a meeting is closed in accordance with Section 52-4-204.

(2) The general public may speak to the Board regarding any issue when acknowledged and recognized by the Board Chair during scheduled public comment.

(a) The chair may give priority to an individual or group who submits a written request to address the Board prior to the meeting, including a brief description of the issue to be addressed.

(b) The Board may not take action during the public comment portion of a meeting.

(c) A Board member may request that an item raised during public comment be placed on a future agenda for possible action in accordance with Board bylaws.

(d)(i) The Chair may limit the time available for individual comments.

(ii) The Chair may request groups to designate a spokesperson.

(iii) The Board shall include in its meeting agenda the amount of time set aside for public comment and the restrictions on individual speakers or group spokespersons.

(3)(a) A member of the general public may speak to items on the agenda:

(i) during the time designated for public comment; or

(ii) at the discretion of and as invited by the Chair, when the item is properly before the Board or a committee.

(b) The Chair may request that public comment be provided in writing.

(4) All presentations to the Board or one of its committees shall exemplify courteous behavior and appropriate language.

(5) The Chair may invite additional comment to the Board or a committee in the Chair's discretion.

(6) In accordance with Subsection 53-4-202(6)(b), at the discretion of the Chair, the Board may discuss a topic raised by the public in an open meeting even if the item was not included in the public meeting notice.

(7) At the discretion of the Chair, a member of the public

may request to comment in the committee meeting by raise of hand.

KEY: school boards, open government

August 7, 2017

Notice of Continuation June 6, 2017

Art X Sec 3

52-4-1

53A-1-401

R277. Education, Administration.**R277-120. Licensing of Material Developed with Public Education Funds.****R277-120-1. Authority and Purpose.**

(1) This rule is authorized by:

(a) Article X, Section 3 of the Utah Constitution, which vests general control and supervision over public education in the Board;

(b) Section 53A-1-401, which allows the Board to make rules to execute the Board's duties and responsibilities under the Utah Constitution and state law; and

(c) Subsection 53A-1-402(1)(e), which directs the Board to encourage school productivity and cost effectiveness measures.

(2) The purpose of this rule is to:

(a) establish requirements for licensing of courseware and materials produced with public education funds; and

(b) promote a policy that education materials produced with public funds be openly, publicly, and freely accessible for use by others.

R277-120-2. Definitions.

(1)(a) "CC-BY license" means a copyright license developed by Creative Commons, which allows other users to:

(i) copy and redistribute the material in any medium or format; and

(ii) remix, transform, and build upon the material.

(b) Under a CC-BY license, a licensee may share the materials in any manner, including commercially.

(c) Under a CC-BY license, a licensee shall:

(i) give appropriate credit to the licensor;

(ii) provide a link to the license; and

(iii) indicate if the licensee made changes to the licensor's work.

(2) "Public education materials" means courseware and materials developed with public education funds and includes:

(a) syllabi;

(b) instructional materials;

(c) modules;

(d) textbooks, including teacher's editions;

(e) student guides;

(f) supplemental materials;

(g) formative and summative assessment supports;

(h) laboratory activities;

(i) simulations;

(j) musical or dramatic compositions;

(k) audio, video or photographic material;

(l) manuals;

(m) codes; and

(n) software.

(3) "Utah Education Network" or "UEN" means an online education materials resource maintained by the Utah Education and Telehealth Network offering services to educators and students throughout the state of Utah.

R277-120-3. Public Education Materials Funded by the Board.

(1) The Superintendent shall share public education materials developed with funds controlled by the Board under a CC-BY license.

(2) The Superintendent shall share materials developed in accordance with Subsection (1) through UEN, where appropriate, or through other appropriate means of making public education materials available to educators and the public.

(3)(a) An individual or entity that shares or adapts public education materials identified in Subsection (1) shall:

(i) provide attribution to the Board;

(ii) provide a link to the license; and

(iii) indicate if any changes were made to the original

materials.

(b) An individual or entity may make attribution in any reasonable manner, but not in any way that implies the Board endorses any adaptation of the materials without express authorization of the Board.

(4) The Superintendent may request a copy of shared or adapted public education materials be provided to the Board.

(5) If an employee of the Board develops public education materials as part of the employee's employment, the public education materials shall be the property of the Board, subject to licensing in accordance with this R277-120-3.

R277-120-4. Public Education Materials Funded by an LEA.

(1) An LEA shall develop and maintain a policy regarding public education materials developed with the LEA's funds.

(2) A policy developed in accordance with Subsection (1) shall identify:

(a) whether the LEA will share public education materials with a CC-BY license or another license approved by the LEA's governing board;

(b) whether use of LEA developed public education materials will require attribution to the LEA;

(c) whether the LEA will charge third parties for use of the materials;

(d) whether the LEA reserves the right to review and approve materials developed by employees on contract time; and

(e) whether the LEA restricts employees from sharing materials purchased with LEA funds or specifically licensed for LEA use.

(3) An LEA may not charge an educator in a Utah public school for use of materials developed with LEA funds.

R277-120-5. Classroom Materials Developed by Utah Educators.

(1)(a) A public education employee may not sell public education materials developed in whole or in part with funds from the Board or an LEA.

(b) If a public education employee sells public education materials subject to Subsection (1)(a) for personal gain, the employee may be subject to the provisions of Section 67-16-4.

(2) An LEA may review and approve materials developed by educators on contract time consistent with a policy adopted in accordance with Subsection R277-120-4(d).

(3)(a) A Utah licensed educator need not seek permission from the educator's LEA to share classroom materials developed using the educator's personal time and resources.

(b) An educator may share materials developed in accordance with Subsection (3)(a) through a CC-BY license.

(4)(a) A Utah licensed educator may only share materials that are consistent with the Utah Professional Educator Standards contained in R277-515.

(b) An educator may not share materials that advocate illegal activities or materials that are inconsistent with the educator's legal and role model responsibilities.

(5) The Superintendent may offer professional development programs that offer support, guidance, and instruction to educators who wish to create, use, or continuously improve public education materials shared in accordance with this R277-120.

KEY: licensing, materials
August 7, 2017

Art X Sec 3
53A-1-401
53A-1-402(1)(e)

R277. Education, Administration.**administrative rules****R277-121. Board Waiver of Administrative Rules.**

August 7, 2017

Art X Sec 3
53A-1-401**R277-121-1. Authority and Purpose.**

(1) This rule is authorized by:

(a) Utah Constitution Article X, Section 3, which vests general control and supervision over public education in the Board; and

(b) Section 53A-1-401, which allows the Board to make rules to execute the Board's duties and responsibilities under the Utah Constitution and state law.

(2) The purpose of this rule is to establish procedures for an LEA to request a waiver from a Board rule.

R277-121-2. Procedures for Waiver Requests.

(1)(a) An LEA board may request a waiver from a Board rule by filing a written request with the Superintendent.

(b) A written request under Subsection (1)(a) shall include:

(i) verification that the LEA board voted to request the waiver in an open meeting;

(ii) student achievement data that supports the requested waiver;

(iii) data demonstrating the cost effectiveness of the waiver request;

(iv) a proposed agreement with the Board that includes:

(A) a proposed effective date;

(B) provisions for public review and accountability;

(C) data gathering and reporting timelines;

(D) a sunset date; and

(v) in the case of a charter school, a recommendation from the board of the school's authorizer.

(2) An LEA board may not request a waiver from a Board rule:

(a) that is required by or adopts criteria from a federal statute, federal regulation, or state law;

(b) that would negatively affect the health, safety, or welfare of public education students;

(c) that could reasonably result in discrimination or harassment of public school students or employees;

(d) that would benefit one element of the public education system to the detriment of another; or

(e) when the concerns giving rise to an LEA board's request could be addressed through means other than waiver of Board rules.

R277-121-3. Board Review of Waiver Requests.

(1) The Board Executive Committee may assign a waiver request made under this Rule R277-121 to a Board standing committee.

(2) The standing committee assigned in accordance with Subsection (1):

(a) may solicit additional information or testimony;

(b) shall review the request in an open meeting; and

(c) shall make a recommendation for consideration by the full Board.

(3) The Board Executive Committee may consolidate consideration of duplicate or similar requests.

(4) The Board shall consider available data in evaluating an LEA waiver request and shall make data driven decisions.

R277-121-4. Annual Review of Approved Waivers.

(1) An LEA that receives a waiver from Board rule in accordance with this R277-121 for more than one year shall annually report to a Board committee:

(a) student achievement data that supports continuation of the requested waiver; and

(b) data demonstrating the cost effectiveness of the waiver, if applicable.

KEY: Utah State Board of Education, waivers,

R277. Education, Administration.**R277-410. Accreditation of Schools.****R277-410-1. Authority and Purpose.**

- (1) This rule is authorized by:
 - (a) Utah Constitution Article X, Section 3, which vests general control and supervision over public education in the Board;
 - (b) Section 53A-1-401, which allows the Board to make rules to execute the Board's duties and responsibilities under the Utah Constitution and state law; and
 - (c) Section 53A-1-402, which directs the Board to establish rules governing school accreditation.
- (2) The purpose of this rule is to require qualifying secondary schools to be accredited.

R277-410-2. Definitions.

For the purposes of this rule:

"Qualifying secondary school" means a public school that:

- (1) includes any of grades 9-12; or
- (2) offers credits toward high school graduation.

R277-410-3. Accreditation of Public Schools.

- (1) A qualifying secondary school shall obtain accreditation from a regional accrediting body.
- (2) If a qualifying secondary school does not obtain accreditation before the beginning of the school's second year of operation, the credit awarded by the qualifying secondary school is considered earned from a non-accredited source as described in Section R277-705-3:
 - (a) for the school's first year of operation; and
 - (b) until the school becomes accredited.
- (3)(a) In addition to standards set by an accrediting body, the Superintendent shall establish Utah-specific assurances demonstrating compliance with state law and Board rule.
- (b) The Superintendent shall ensure that qualified secondary schools meet the Utah-specific assurances described in Subsection (3)(a).
- (4) The Superintendent may require on-site visits as part of the accreditation process.

R277-410-4. Transfer or Acceptance of Credit.

- (1) A qualifying secondary school shall accept transfer credits from an accredited qualifying secondary school consistent with Section 53A-13-108.5 and Section R277-705-3.
- (2) A qualifying secondary school may accept transfer credits from other credit sources consistent with Section R277-705-3.

KEY: accreditation, public schools, nonpublic schools

August 7, 2017

Notice of Continuation June 6, 2017

Art X Sec 3

53A-1-402(1)(c)

53A-1-401

R277. Education, Administration.**R277-419. Pupil Accounting.****R277-419-1. Authority and Purpose.**

- (1) This rule is authorized by:
- (a) Utah Constitution Article X, Section 3, which vests general control and supervision over public education in the Board;
 - (b) Section 53A-1-401, which allows the Board to make rules to execute the Board's duties and responsibilities under the Utah Constitution and state law;
 - (c) Subsection 53A-1-402(1)(e), which directs the Board to establish rules and standards regarding:
 - (i) cost-effectiveness;
 - (ii) school budget formats; and
 - (iii) financial, statistical, and student accounting requirements;
 - (d) Subsection 53A-1-404(2), which requires a local school board's auditing standards to include financial accounting and student accounting;
 - (e) Subsection 53A-1-301(3)(d), which requires the Superintendent to present to the Governor and the Legislature data on the funds allocated to LEAs; and
 - (f) Section 53A-3-404, which requires annual financial reports from all school districts.
- (2) The purpose of this rule is to specify pupil accounting procedures used in apportioning and distributing state funds for education.

R277-419-2. Definitions.

- (1) "Aggregate Membership" means the sum of all days in membership during a school year for eligible students enrolled in a public school.
- (2) "Approved CTE course" means a course approved by the Board within the Career and Technical Education (CTE) Pathways in the eight areas of study.
- (3) "Blended learning program" means a program under the direction of an LEA:
- (a) where a student learns at least in part:
 - (i) at a supervised brick and mortar location away from a student's home; and
 - (ii) through an online delivery; and
 - (b) that may include some element of student control over time, place, or path, or pace.
- (4) "Brick and mortar school" means a traditional school or traditional school building.
- (5) "Competency based learning program" means an education program that requires a student to acquire a competency and includes a classroom structure and operation that aid and facilitate the acquisition of specified competencies on an individual basis wherein a student is allowed to master and demonstrate competencies as fast as the student is able.
- (6) "Continuing enrollment measurement" means a methodology used to establish a student's continuing membership or enrollment status for purposes of generating membership days.
- (7) "Data Clearinghouse" means the electronic data collection system used by the Superintendent to collect information required by law from LEAs about individual students at certain points throughout the school year to support the allocation of funds and accountability reporting.
- (8) "Distance learning program" means a program, under the direction of an LEA, in which students receive educational services in a location other than a brick and mortar school, and may include educational services delivered over the internet.
- (9) "Early graduation student" means a student who has an early graduation student education plan as described in Rule R277-703.
- (10) "Electronic High School" means a rigorous program offering 9-12 grade level courses delivered over the Internet and

coordinated by the Superintendent.

- (11) "Eligible student" means a student who satisfies the criteria for enrollment in an LEA, set forth in Subsection R277-419-5.
- (12) "Enrollment verification data" includes:
- (a) a student's birth certificate or other verification of age;
 - (b) verification of immunization or exemption from immunization form;
 - (c) proof of Utah public school residency;
 - (d) family income verification; or
 - (e) special education program information, including:
 - (i) an individualized education program;
 - (ii) a Section 504 accommodation plan; or
 - (iii) an English learner plan.
- (13) "Face-to-face learning program" means a program within an LEA that consists of eligible, enrolled public school students who physically attend school in a brick and mortar school.
- (14) "Home school" means the formal instruction of children in their homes instead of in an LEA. The differences between a home school student and an online student include:
- (a) an online student may receive instruction at home, but the student is enrolled in a public school that follows state Core Standards;
 - (b) an online student is:
 - (i) subject to laws and rules governing state and federal mandated tests; and
 - (ii) included in accountability measures;
 - (c) an online student receives instruction under the direction of highly qualified, licensed teachers who are subject to the licensure requirements of Rule R277-502 and fingerprint and background checks consistent with Rules R277-516 and R277-520;
 - (d) instruction delivered in a home school course is not eligible to be claimed in membership of an LEA and does not qualify for funding under the Minimum School Program in Title 53A, Chapter 17a, Minimum School Program Act.
- (15) "Home school course" means instruction:
- (a) delivered in a home school environment where the curriculum and instruction methods, evaluation of student progress or mastery, and reporting, are provided or administered by the parent, guardian, custodian, or other group of individuals; and
 - (b) not supervised or directed by an LEA.
- (16) "Influenza pandemic" or "pandemic" means a global outbreak of serious illness in people. It may be caused by a strain of influenza that most people have no natural immunity to and that is easily spread from person to person.
- (17) "ISI-1" means a student who receives 1 to 59 minutes of YIC related services during a typical school day.
- (18) "ISI-2" means a student who receives 60 to 179 minutes of YIC related services during a typical school day.
- (19) "Membership" means a public school student is on the current roll of a public school class or public school as of a given date:
- (a) A student is a member of a class or school from the date of entrance at the school and is placed on the current roll until official removal from the class or school due to the student having left the school.
 - (b) Removal from the roll does not mean that an LEA should delete the student's record, only that the student should no longer be counted in membership.
- (20) "Minimum School Program" means the same as that term is defined in Section 53A-17a-103.
- (21) "Nontraditional Program" means a program within an LEA that consists of eligible, enrolled public school students where the student receives instruction through a:
- (a) distance learning program;
 - (b) online learning program;

- (c) blended learning program; or
- (d) competency based learning program.
- (22) "Online learning program" means a program:
 - (a) that is under the direction of an LEA; and
 - (b) in which students receive educational services primarily over the internet.
- (23) "Private school" means an educational institution that:
 - (a) is not an LEA;
 - (b) is owned or operated by a private person, firm, association, organization, or corporation; and
 - (c) is not subject to governance by the Board consistent with the Utah Constitution.
- (24) "Program" means a course of instruction within a school that is designed to accomplish a predetermined curricular objective or set of objectives.
- (25) "Resource" means a student who receives 1 to 179 minutes of special education services during a typical school day consistent with the student's IEP provided for under the Individuals with Disabilities Education Act (IDEA), 20 U.S.C. Sec. 1400 et seq., amended in 2004.
- (26) "Qualifying school age" means:
 - (a) a person who is at least five years old and no more than 18 years old on or before September 1;
 - (b) with respect to special education, a person who is at least three years old and no more than 21 years old on or before September 1;
 - (c) with respect to YIC, a person who is at least five years old and no more than 21 years old on or before September 1.
- (27) "Retained senior" means a student beyond the general compulsory school age who is authorized at the discretion of an LEA to remain in enrollment as a high school senior in the year(s) after the student's cohort has graduated due to:
 - (a) sickness;
 - (b) hospitalization;
 - (c) pending court investigation or action; or
 - (d) other extenuating circumstances beyond the control of the student.
- (28) "S1" means the record maintained by the Superintendent containing individual student demographic and school membership data in a Data Clearinghouse file.
- (29) "S2" means the record maintained by the Superintendent containing individual student data related to participation in a special education program in a Data Clearinghouse file.
- (30) "S3" means the record maintained by the Superintendent containing individual student data related to participation in a YIC program in a Data Clearinghouse file.
- (31) "School" means an educational entity governed by an LEA that:
 - (a) is supported with public funds;
 - (b) includes enrolled or prospectively enrolled full-time students;
 - (c) employs licensed educators as instructors that provide instruction consistent with Section R277-502-5;
 - (d) has one or more assigned administrators;
 - (e) is accredited consistent with Section R277-410-3; and
 - (f) administers required statewide assessments to the school's students.
- (32) "School day" means:
 - (a) a minimum of two hours per day per session in kindergarten and a minimum of four hours per day in grades one through twelve, subject to the following constraints described in Subsection (32)(b).
 - (b)(i) All school day calculations shall exclude lunch periods and pass time between classes but may include recess periods that include organization or instruction from school staff.
 - (ii) Each day that satisfies hourly instruction time shall count as a school day, regardless of the number or length of

class periods or whether or not particular classes meet.

(33) "School membership" means membership other than in a special education or YIC program in the context of the Data Clearinghouse.

(34) "School of enrollment" means:

- (a) a student's school of record; and
- (b) the school that maintains the student's cumulative file, enrollment information, and transcript for purposes of high school graduation.

(35) "School year" means the 12 month period from July 1 through June 30.

(36) "Self-contained" means a public school student with an IEP or YIC, who receives 180 minutes or more of special education or YIC related services during a typical school day.

(37) "Self-Contained Resource Attendance Management (SCRAM)" means a record that tracks the aggregate membership of public school special education students for state funding purposes.

(38) "SSID" means Statewide Student Identifier.

(39) "Unexcused absence" means an absence charged to a student when:

(a) the student was not physically present at school at any of the times attendance checks were made in accordance with Subsection R277-419-4(8); and

(b) the student's absence could not be accounted for by evidence of a legitimate or valid excuse in accordance with local board policy on truancy as defined in Section 53A-11-101.

(40) "Year end upload" means the Data Clearinghouse file due annually by July 15 from LEAs to the Superintendent for the prior school year.

(41) "Youth in Custody (YIC)" means a person under the age of 21 who is:

- (a) in the custody of the Department of Human Services;
- (b) in the custody of an equivalent agency of a Native American tribe recognized by the United States Bureau of Indian Affairs and whose custodial parent or legal guardian resides within the state; or
- (c) being held in a juvenile detention facility.

R277-419-3. Schools and Programs.

(1)(a) The Superintendent shall provide a list to each school detailing the required accountability reports and other state-mandated reports for the school type and grade range.

(b) All schools shall submit a Clearinghouse report to the Superintendent.

(c) All schools shall employ at least one licensed educator and one administrator.

(2)(a) A student who is enrolled in a program is considered a member of a public school.

(b) The Superintendent may not require programs to receive separate accountability and other state-mandated reports.

(c) A student reported under an LEA's program shall be included in the LEA's WPU and student enrollment calculations of the LEA's school of enrollment.

(d) A course taught at a program shall be credited to the appropriate school of enrollment.

(3) A private school or program may not be required to submit data to the Superintendent.

(4) A private school or program may not receive annual accountability reports.

R277-419-4. Minimum School Days, LEA Records, and Audits.

(1)(a) Except as provided in Subsection (1)(b), an LEA shall conduct school for at least 990 instructional hours and 180 school days each school year.

(b) an LEA may seek an exception to the number of school days described in Subsection (1)(a) for an individual student or school as provided for in Section R277-419-11.

(2) An LEA may offer the required school days and hours described in Subsection (1)(a) at any time during the school year, consistent with the law.

(3)(a) The Board may waive the school day and hour requirement, following a vote of Board members, pursuant to a directive from the Utah State Health Department or a local health department, that results in the closure of a school in the event of a pandemic or other public health emergency.

(b) In the event that the Board is unable to meet in a timely manner, the Superintendent may issue a waiver following consultation with a majority of Board members.

(c) A waiver may be for a designated time period, for a specific area, or for a specific LEA in the state, as determined by the health department directive.

(d) A waiver may allow an LEA to continue to receive state funds for pupil services and reimbursements.

(e) A waiver by the Board or Superintendent shall direct an LEA to provide as much notice to students and parents of the suspension of school services, as is reasonably possible.

(f) A waiver shall direct an LEA to comply with health department directives, but to continue to provide any services to students that are not inconsistent with the directive.

(g) The Board may encourage an LEA to provide electronic or distance learning services to affected students for the period of the pandemic or other public health emergency to the extent of personnel and funds available.

(4) Minimum standards apply to all public schools in all settings unless Utah law or this rule provides for a specific exception.

(5) An LEA's governing board is encouraged to provide adequate school days and hours in the LEA's yearly calendar to avoid the necessity of a waiver request except in the most extreme circumstances.

(6) To determine student membership, an LEA shall ensure that records of daily student attendance are maintained in each school which clearly and accurately show for each student the:

- (a) entry date;
- (b) exit date;
- (c) exit or high school completion status;
- (d) whether or not an absence was excused;
- (e) disability status (resource or self-contained, if applicable); and
- (f) YIC status (ISI-1, ISI-2 or self-contained, if applicable).

(7) An LEA shall ensure that:

(a) computerized or manually produced records for CTE programs are kept by teacher, class, and Classification of Instructional Program (CIP) code; and

(b) the records described in Subsection (7)(a) clearly and accurately show for each student in a CTE class the:

- (i) entry date;
- (ii) exit date; and
- (iii) excused or unexcused status of absence.

(8) An LEA shall ensure that each school within the LEA completes a minimum of one attendance check each school day.

(9) Due to school activities requiring schedule and program modification during the first days and last days of the school year:

(a) for the first five school days, an LEA may report aggregate days of membership equal to the number recorded for the second five-day period of the school year;

(b) for the last five-day period, an LEA may report aggregate days of membership equal to the number recorded for the immediately preceding five-day period; and

(c) schools shall continue instructional activities throughout required calendared instruction days.

(10) An LEA shall employ an independent auditor, under contract, to:

- (a) annually audit student accounting records; and

(b) report the findings of the audit to:

- (i) the LEA board; and
- (ii) the Finance and Statistics Section of the Board.

(11) Reporting dates, forms, and procedures are found in the State of Utah Legal Compliance Audit Guide, provided to LEAs by the Superintendent in cooperation with the State Auditor's Office and published under the heading of APP C-5.

(12) The Superintendent:

(a) shall review each LEA's student membership and fall enrollment audits as they relate to the allocation of state funds in accordance with the policies and procedures established in Sections R277-484-7 and 8; and

(b) may periodically or for cause review LEA records and practices for compliance with the laws and this rule.

R277-419-5. Student Membership Eligibility and Continuing Enrollment Measurements.

(1) A student may enroll in two or more LEAs at the discretion of the LEAs.

(2) A kindergarten student may only enroll in one LEA at a time.

(3) In order to generate membership for funding through the Minimum School Program for any clock hour of instruction on any school day, an LEA shall ensure that a student being counted by the LEA in membership:

(a) has not previously earned a basic high school diploma or certificate of completion;

(b) has not been enrolled in a YIC program with a YIC time code other than ISI-1 or ISI-2;

(c) does not have unexcused absences, which are determined using one of the continuing enrollment measurements described in Subsection (4);

(d) is a resident of Utah as defined under Sections 53A-2-201 through 213;

(e) is of qualifying school age or is a retained senior;

(f)(i) is expected to attend a regular learning facility operated or recognized by an LEA on each regularly scheduled school day, if enrolled in a face-to-face learning program;

(ii) has direct instructional contact with a licensed educator provided by an LEA at:

(A) an LEA-sponsored center for tutorial assistance; or

(B) the student's place of residence or convalescence for at least 120 minutes each week during an expected period of absence, if physically excused from such a facility for an extended period of time, due to:

- (I) injury;
- (II) illness;
- (III) surgery;
- (IV) suspension;
- (V) pregnancy;
- (VI) pending court investigation or action; or
- (VII) an LEA determination that home instruction is necessary;

(iii) is enrolled in an approved CTE course(s) on the campus of another state funded institution where such a course is:

(A) not offered at the student's school of membership;

(B) being used to meet Board-approved CTE graduation requirements under Subsection R277-700-6(14); and

(C) a course consistent with the student's SEOP/Plan for College and Career Readiness; or

(iv) is enrolled in a nontraditional program under the direction of an LEA, other than the Utah Electronic High School, that:

(A) is consistent with the student's SEOP/Plan for College and Career Readiness;

(B) has been approved by the student's counselor; and

(C) includes regular instruction or facilitation by a designated employee of an LEA.

(4) An LEA shall use one of the following continuing enrollment measures:

(a) For a student primarily enrolled in a face-to-face learning program, the LEA may not count a student as an eligible student if the eligible student has unexcused absences during all of the prior ten consecutive school days.

(b) For a student enrolled in a nontraditional program, an LEA shall:

(i) adopt a written policy that designates a continuing enrollment measurement to document the continuing membership or enrollment status for each student enrolled in the nontraditional program consistent with Subsection (3)(c);

(ii) document each student's continued enrollment status in compliance with the continuing enrollment policy at least once every ten consecutive school days; and

(iii) appropriately adjust and update student membership records in the student information system for students that did not meet the continuing enrollment measurement, consistent with Subsection (3)(c).

(5) The continuing enrollment measurement described in Subsection (4)(b) may include some or all of the following components, in addition to other components, as determined by an LEA:

(a) a minimum student login or teacher contact requirement;

(b) required periodic contact with a licensed educator;

(c) a minimum hourly requirement, per day or week, when students are engaged in course work; or

(d) required timelines for a student to provide or demonstrate completed assignments, coursework or progress toward academic goals.

(6) For a student enrolled in both face-to-face and nontraditional programs, an LEA shall measure a student's continuing enrollment status using the methodology for the program in which the student earns the majority of their membership days.

(7)(a) An LEA desiring to generate membership for student enrollment in courses outlined in Subsection (3)(f)(iii), or to seek a waiver from a requirement(s) in Subsection (3)(f)(iii), shall submit an application for course approval by April 1 of the year prior to which the membership will be counted.

(b) An LEA shall be notified within 30 days of the application deadline if courses have been approved.

R277-419-6. Student Membership Calculations.

(1)(a) Except as provided in Subsection (1)(b) or (1)(c), a student enrolled in only one LEA during a school year is eligible for no more than 180 days of regular membership per school year.

(b) An early graduation student may be counted for more than 180 days of regular membership in accordance with the student's early graduation student education plan.

(c) A student transferring within an LEA to or from a year-round school is eligible for no more than 205 days of regular membership per school year.

(2)(a) Except as provided in Subsection (2)(b), (2)(c), or (2)(d), a student enrolled in two or more LEAs during a school year is eligible for no more than 180 days of regular membership per school year.

(b) A student transferring to or from an LEA with a schedule approved under Subsection R277-419-4(1)(b) is eligible for no more than 220 days of regular membership per school year.

(c) A student transferring to or from an LEA where the student attended or will attend a year-round school is eligible for no more than 205 days of regular membership per school year.

(d) If the exceptions in Subsections (2)(b) and (2)(c) do not apply but a student transfers from one LEA to another at

least one time during the school year, the student is eligible for regular membership in an amount not to exceed the sum of:

(i) 170 days; plus

(ii) 10 days multiplied by the number of LEAs the student attended during the school year.

(3) If a student is enrolled in two or more LEAs during a school year and the aggregate regular membership generated for the student between all LEAs exceeds the amount allowed under Subsection (2), the Superintendent shall apportion the days of regular membership allowed between the LEAs.

(4) If a student was enrolled for only part of the school year or only part of the school year, an LEA shall prorate the student's membership according to the number of hours, periods or credits for which the student actually was enrolled in relation to the number of hours, periods or credits for which a full-time student normally would have been enrolled. For example:

(a) If the student was enrolled for 4 periods each day in a 7 period school day for all 180 school days, the student's aggregate membership would be 4/7 of 180 days or 103 days.

(b) If the student was enrolled for 7 periods each day in a 7 period school day for 103 school days, the student's membership would also be 103 days.

(5) For students in grades 2 through 12, an LEA shall calculate the days in membership using a method equivalent to the following: total clock hours of instruction for which the student was enrolled during the school year divided by 990 hours and then multiplied by 180 days and finally rounded up to the nearest whole day. For example, if a student was enrolled for only 900 hours during the school year, the student's aggregate membership would be $(900/990) \times 180$, and the LEA would report 164 days.

(6) For students in grade 1, an LEA shall adjust the first term of the formula to use 810 hours as the denominator.

(7) For students in kindergarten, an LEA shall adjust the first term of the formula to use 450 hours as the denominator.

(8) The sum of regular plus self-contained special education and self-contained YIC membership days may not exceed 180 days.

(9) The sum of regular and resource special education membership days may not exceed 360 days.

(10) The sum of regular, ISI-1 and ISI-2 YIC membership days may not exceed 360 days.

(11) An LEA may also count a student in membership for the equivalent in hours of up to:

(a) one period each school day, if the student has been:

(i) released by the school, upon a parent or guardian's request, during the school day for religious instruction or individual learning activity consistent with the student's SEOP/Plan for College and Career Readiness; or

(ii) participating in one or more extracurricular activities under Rule R277-438, but has otherwise been exempted from school attendance under Section 53A-11-102 for home schooling;

(b) two periods each school day per student for time spent in bus travel during the regular school day to and from another state-funded institution, if the student is enrolled in CTE instruction consistent with the student's SEOP/Plan for College and Career Readiness;

(c) all periods each school day, if the student is enrolled in:

(i) a concurrent enrollment program that satisfies all the criteria of Rule R277-713;

(ii) a private school without religious affiliation under a contract initiated by an LEA to provide special education services which directs that the instruction be paid by public funds if the contract with the private school is approved by an LEA board in an open meeting;

(iii) a foreign exchange student program under Subsection 53A-2-206(8);

(iv) Electronic High School courses for credit which meet curriculum requirements, consistent with the student's SEOP/Plan for College and Career Readiness and following written school counselor approval; or

(v) a school operated by an LEA under a Utah Schools for the Deaf and the Blind IEP provided that:

(A) the student may only be counted in S1 membership and may not have an S2 record; and

(B) the S2 record for the student is submitted by the Utah Schools for the Deaf and the Blind.

R277-419-7. Calculations for a First Year Charter School.

(1) For the first operational year of a charter school or a new satellite campus, the Superintendent shall determine the charter school's WPU funding based on October 1 counts.

(2) For the second operational year of a charter school or a new satellite campus, the Superintendent shall determine the charter school's WPU funding based on Section 53A-17a-106.

R277-419-8. Reporting Requirements.

(1) An LEA shall report aggregate membership for each student via the School Membership field in the S1 record and special education membership in the SCRAM Membership field in the S2 record and YIC membership in the S3 record of the Year End upload of the Data Clearinghouse file.

(2) In the Data Clearinghouse, aggregate membership is calculated in days of membership.

R277-419-9. High School Completion Status.

(1) An LEA shall account for the final status of all students who enter high school (grades 9-12) whether they graduate or leave high school for other reasons, using the following decision rules to indicate the high school completion or exit status of each student who leaves the Utah public education system:

(a) graduates are students who earn a basic high school diploma by satisfying one of the options consistent with Subsection R277-705-4(2) or out-of-school youths of school age who complete adult education secondary diploma requirements consistent with R277-733;

(b) completers are students who have not satisfied Utah's requirements for graduation but who:

(i) are in membership in twelfth grade on the last day of the school year; and

(ii)(A) meet any additional criteria established by an LEA consistent with its authority under Section R277-705-4;

(B) meet any criteria established for special education students under Utah State Board of Education Special Education Rules, Revised, June 2016, and available at: <http://www.schools.utah.gov/sars/Laws.aspx> and the Utah State Board of Education;

(C) meet any criteria established for special education students under Subsection R277-700-8(5); or

(D) pass a General Educational Development (GED) test with a designated score;

(c) continuing students are students who:

(i) transfer to higher education, without first obtaining a diploma;

(ii) transfer to the Utah Center for Assistive Technology without first obtaining a diploma; or

(iii) age out of special education;

(d) dropouts are students who:

(i) leave school with no legitimate reason for departure or absence;

(ii) withdraw due to a situation so serious that educational services cannot be continued even under the conditions of Subsection R277-419-5(3)(f)(ii);

(iii) are expelled and do not re-enroll in another public education institution; or

(iv) transfer to adult education;

(e) an LEA shall exclude a student from the cohort calculation if the student:

(i) transfers out of state, out of the country, to a private school, or to home schooling;

(ii) is a U.S. citizen who enrolls in another country as a foreign exchange student;

(iii) is a non-U.S. citizen who enrolls in a Utah public school as a foreign exchange student under Section 53A-2-206 in which case the student shall be identified by resident status (J for those with a J-1 visa, F for all others), not by an exit code;

(iv) dies; or

(v) beginning with the 2015-2016 school year, is attending an LEA that is not the student's school of enrollment.

(2)(a) An LEA shall report the high school completion status or exit code of each student to the Superintendent as specified in Data Clearinghouse documentation.

(b) High School completion status or exit codes for each student are due to the Superintendent by year end upload for processing and auditing.

(c) Except as provided in Subsection (2)(d), an LEA shall submit any further updates of completion status or exit codes by October 1 following the end of a student's graduating cohort pursuant to Section R277-484-3.

(d) An LEA with an alternative school year schedule where all of the students have an extended break in a season other than summer, shall submit the LEA's data by the next complete data submission update, following the LEA's extended break, as defined in Section R277-484-3.

(3)(a) The Superintendent shall report a graduation rate for each school, LEA, and the state.

(b) The Superintendent shall calculate the graduation rates in accordance with applicable federal law.

(c) The Superintendent shall include a student in a school's graduation rate if:

(i) the school was the last school the student attended before the student's expected graduation date; and

(ii) the student does not meet any exclusion rules as stated in Subsection (1)(e).

(d) The last school a student attended will be determined by the student's exit dates as reported to the Data Clearinghouse.

(e) A student's graduation status will be attributed to the school attended in their final cohort year.

(f) If a student attended two or more schools during the student's final cohort year, a tie-breaking logic to select the single school will be used in the following hierarchical order of sequence:

(i) school with an attached graduation status for the final cohort year;

(ii) school with the latest exit date;

(iii) school with the earliest entry date;

(iv) school with the highest total membership;

(v) school of choice;

(vi) school with highest attendance; or

(vii) school with highest cumulative GPA.

(g) The Superintendent shall report the four-year cohort rate on the annual state reports.

R277-419-10. Student Identification and Tracking.

(1)(a) Pursuant to Section 53A-1-603.5, an LEA shall:

(i) use the SSID system maintained by the Superintendent to assign every student enrolled in a program under the direction of the Board or in a program or a school that is supported by public school funding a unique student identifier; and

(ii) display the SSID on student transcripts exchanged with LEAs and Utah public institutions of higher education.

(b) The unique student identifier:

(i) shall be assigned to a student upon enrollment into a public school program or a public school-funded program;

(ii) may not be the student's social security number or

contain any personally identifiable information about the student.

(2) An LEA shall require all students to provide their legal first, middle, and last names at the time of registration to ensure that the correct SSID follows students who transfer among LEAs.

(a) A school shall transcribe the names from the student's birth certificate or other reliable proof of the student's identity and age, consistent with Section 53A-11-503;

(b) The direct transcription of student names from birth certificates or other reliable proof of student identity and age shall be the student's legal name for purposes of maintaining school records; and

(c) An LEA may modify the order of student names, provide for nicknames, or allow for different surnames, consistent with court documents or parent preferences, so long as legal names are maintained on student records and used in transmitting student information to the Superintendent.

(3) The Superintendent and LEAs shall track students and maintain data using students' legal names.

(4) If there is a compelling need to protect a student by using an alias, an LEA should exercise discretion in recording the name of the student.

(5) An LEA is responsible to verify the accuracy and validity of enrollment verification data, prior to enrolling students in the LEA, and provide students and their parents with notification of enrollment in a public school.

(6) An LEA shall ensure enrollment verification data is collected, transmitted, and stored consistent with sound data policies, established by the LEA as required in Rule R277-487.

R277-419-11. Variances.

(1)(a) An LEA may, at its discretion, make an exception for school attendance for a public school student, in the length of the school day or year, for a student with compelling circumstances.

(b) The time an excepted student is required to attend school shall be established by the student's IEP or SEOP/Plan for College and Career Readiness.

(2)(a) An LEA shall plan for emergency, activity, and weather-related exigency time in its annual calendaring.

(b) If school is closed for any reason, the school shall make up the instructional time missed under the emergency/activity time as part of the minimum required time to qualify for full Minimum School Program funding.

(3)(a) To provide planning and professional development time for staff, an LEA may hold school longer some days of the week and shorter other days so long as minimum school day requirements, as provided for in Subsection R277-419-2(32), are satisfied.

(b) A school may conduct parent-teacher and Student Education Plan (SEP) conferences during the school day.

(c) Parent-teacher and SEP conferences may only be held for a total of the equivalent of three full school days or a maximum of 16.5 hours for the school year.

(d) Student membership for professional development or parent-teacher conference days shall be counted as that of the previous school day.

(e) An LEA may designate no more than 12 instructional days at the beginning of the school year, at the end of the school year, or both for the assessment of students entering or completing kindergarten.

(f) If instruction days are designated for kindergarten assessment:

(i) an LEA shall designate the days in an open meeting;

(ii) an LEA shall provide adequate notice and explanation to kindergarten parents well in advance of the assessment period;

(iii) qualified school employees shall conduct the

assessment consistent with Section 53A-3-410; and

(iv) assessment time per student shall be adequate to justify the forfeited instruction time.

(g) The final decision and approval regarding planning time, parent-teacher and SEP conferences rests with an LEA, consistent with Utah law and Board administrative rules.

(h) Total instructional time and school calendars shall be approved by an LEA in an open meeting.

(4) A school using a modified 45-day/15-day year round schedule initiated prior to July 1, 1995 shall be considered to be in compliance with this rule if the school's schedule includes a minimum of 990 hours of instruction time in a minimum of 172 days.

**KEY: education finance, school enrollment, pupil accounting
October 11, 2016
Notice of Continuation August 14, 2017**

**Art X Sec 3
53A-1-401
53A-1-402(1)(e)
53A-1-404(2)
53A-1-301(3)(d)
53A-3-404
53A-3-410**

R277. Education, Administration.**R277-460. Distribution of Substance Abuse Prevention Account.****R277-460-1. Authority and Purpose.**

- (1) This rule is authorized by:
- (a) Utah Constitution Article X, Section 3, which vests general control and supervision over public education in the Board;
- (b) Section 53A-13-102, which directs the Board to adopt rules providing for instruction on the harmful effects of controlled substances;
- (c) Section 53A-1-401, which allows the Board to make rules to execute the Board's duties and responsibilities under the Utah Constitution and state law; and
- (d) Section 51-9-405, which provides for funds from the Substance Abuse Prevention Account to be allocated to the Board for:
- (i) substance abuse prevention and education;
 - (ii) substance abuse prevention training for teachers and administrators; and
 - (iii) LEA programs to supplement, not supplant, existing local prevention efforts in cooperation with local substance abuse authorities.
- (2) The purpose of this rule is to provide for the distribution of the Board's share of the money from the Substance Abuse Prevention Account.

R277-460-2. Definitions.

- (1) "Educational materials" means visual and auditory media, curricula, textbooks, and other disposable or non-disposable items that enhance student understanding of the subject matter.
- (2) "Local substance abuse authority" means the person or group designated by the Legislature as the county authority to receive public funds for substance abuse prevention and treatment.
- (3) "Substance abuse prevention education activities and intervention" means proactive educational activities designed to eliminate any illegal use of controlled substances.

R277-460-3. Fund Allocations.

- (1) Before making the distributions described in Subsections (2) and (3), the Superintendent shall retain sufficient substance abuse prevention funds to pay for the salary, benefits, and indirect costs of a program administrator at a salary level to be determined by the Superintendent and support staff costs for the program administrator.
- (2) After the allocation of substance abuse prevention funds is retained as described in Subsection (1), the Superintendent may use up to 45% to:
- (a) purchase educational materials to support and supplement existing substance abuse prevention efforts;
 - (b) encourage and support statewide substance abuse prevention training for school district and charter school teachers and administrators; and
 - (c) promote substance abuse prevention in the classroom.
- (3) At least 55% of the substance abuse prevention funds remaining after the allocation described in Subsection (1) shall be distributed to LEAs for use by the LEAs or individual schools within the LEA based on application.

R277-460-4. Applications.

- (1) The Superintendent shall develop an application for LEAs that are interested in applying for substance abuse prevention funds available as described in this R277-460.
- (2) An LEA shall submit the LEA's application to the specialist designated by the Superintendent.
- (3)(a) Substance abuse prevention funds shall be distributed to LEAs based on funds available from the

Substance Abuse Prevention Account.

- (b) The Superintendent shall describe the available funding amounts in the Board application described in Subsection (1).
- (4) An LEA's application for substance abuse prevention funds shall include the following:
- (a) the applicant's intention to collaborate with the local substance abuse authority and community groups, including shared plans and strategies for substance abuse prevention education, activities, and intervention;
 - (b) the applicant's plan for professional development on substance abuse;
 - (c) the use of funds to implement applicant's plan;
 - (d) teacher reports of classroom implementation and plans for classroom monitoring visits;
 - (e) applicant's enhancement of substance abuse curriculum with additional substance abuse activities and strategies; and
 - (f) applicant's implementation of substance abuse curriculum with school-based behavioral/health or coordinated school health initiatives.

R277-460-5. Limitations on Funds.

- (1) The Superintendent and LEAs shall use substance abuse prevention funds exclusively for purposes set forth in Section 51-9-405.
- (2) Transfer of funds between line items or the extension of project completion dates may be made only with prior written approval of the Superintendent.
- (3) An LEA may not use funds received under this R277-460 to supplant:
- (a) funds currently available to the LEA; or
 - (b) funds available from other state or local sources.

R277-460-6. Evaluation and Reports.

- (1) An applicant that receives substance abuse prevention funds shall provide the Superintendent with a year-end report on or before July 1 of the fiscal year in which the award was made.
- (2) The year-end report described in Subsection (1) shall include:
- (a) an expenditure report;
 - (b) a narrative description of activities funded; and
 - (c) an action research or data project report.
- (3) The Superintendent may require additional evaluation or audit procedures from an award recipient to demonstrate the use of funds consistent with the law and Board rules.
- (4) The Superintendent shall annually report the following information to the Board's Finance Committee:
- (a) the number of LEAs receiving substance abuse prevention funds;
 - (b) a summary of the LEAs' use of program funds; and
 - (c) a description of how the Superintendent is using the funds described in Subsections R277-460-3(1) and (2).

KEY: public schools, substance abuse prevention**August 7, 2017****Notice of Continuation June 6, 2017****Art X Sec 3****53A-13-102****51-9-405**

R277. Education, Administration.**R277-479. Funding for Charter School Students With Disabilities on an IEP.****R277-479-1. Authority and Purpose.**

- (1) This rule is authorized by:
- (a) Utah Constitution Article X, Section 3, which vests general control and supervision over public education in the Board;
- (b) Section 53A-1-401, which allows the Board to make rules to execute the Board's duties and responsibilities under the Constitution and state law;
- (c) Subsection 53A-1-402(1), which directs the Board to adopt rules regarding services for persons with disabilities; and
- (d) Section 53A-15-301, which directs the Board to set standards for state funds appropriated for students with disabilities.
- (2) The purpose of this rule is to specify standards and procedures for funding of charter school students with disabilities on an IEP.

R277-479-2. Definitions.

- (1) "Base" means prior year special education add-on WPU.
- (2) "Charter school" means a school authorized by a charter school authorizer under:
- (a) Section 53A-1a-515;
- (b) Section 53A-1a-521; or
- (c) Section 53A-1a-505.
- (3) "Charter school authorizer" or "authorizer" has the same meaning as that term is defined in Subsection 53A-1a-501.3(4).
- (4) "Estimated enrollment" means a charter school's projected student enrollment in the school's first year of operation as approved by the Superintendent.
- (5) "Foundation" means the average of self-contained and resource special education students average daily membership over the previous five years.
- (6) "Negative growth adjustment" means prior year special education add-on WPU minus weighted negative growth.
- (7) "New charter school" means a charter school with less than five years of operation.
- (8) "Positive growth adjustment" means prior year special education add-on WPU plus weighted growth.
- (9) "Prevalence rate" means the percentage of students with disabilities within the total student enrollment.
- (10) "Previous five years" means the five year span between the seventh and second prior fiscal year.
- (11) "Significant expansion" means a substantial increase in the number of students attending a charter school due to a significant event, such as the addition of new grade levels or additions of sites, that is unlikely to occur on a regular basis.
- (12) "Special education" means specially designed instruction and related services to meet the unique needs of a student with a disability in accordance with R277-750.
- (13) "State Charter School Board" or "SCSB" means the charter school authorizer created in accordance with Section 53A-1a-501.5.
- (14) "Student with a disability" means a student, evaluated in accordance with Utah State Board of Education Special Education Rules, and determined to be eligible for special education and related services.
- (15) "Total enrollment" means the total number of all students enrolled in all campuses of a school as of the October 1 UTREx update.
- (14) "Utah eTranscript and Record Exchange" or "UTREx" means a system that allows:
- (a) individual detailed student records to be exchanged electronically among public education LEAs and the Superintendent; and

- (b) electronic transcripts to be sent to any post-secondary institution that participates in the e-transcript service.

R277-479-3. Charter School Special Education Add-On Funding.

- (1) For existing charter schools, the Superintendent shall calculate the foundation based on the average ADM of students with disabilities for the previous five years.
- (2)(a) For new charter schools, the Superintendent shall calculate the foundation based on the average special education ADM for the number of years the new charter school has been in operation beyond the first year.
- (b) In its first operational year, a new charter school shall receive special education funding based on estimated enrollment.
- (c) Unless a new charter school identifies a purpose and target population in its application focusing on students with disabilities, the estimate of students with disabilities for a new charter school shall be 10 percent of the estimated enrollment.
- (3) The foundation is the minimum amount a charter school may receive for special education-add on funding.
- (4)(a) The Superintendent shall apply a positive growth adjustment to a charter school's foundation for weighted growth.
- (b) Weighted growth is determined by comparing special education ADM and total ADM from the third and second prior fiscal years.
- (c) The rate of growth in special education ADM may not exceed the rate of growth in total ADM.
- (d) The Superintendent shall multiply positive weighted growth by a factor of 1.53 and add the result to a charter school's foundation.
- (e) The Superintendent may not impose a funding cap based on the charter prevalence rate because a charter school is designed and authorized specifically to serve students with disabilities.
- (f) When there is no growth, either because a charter school is new or because the same number of students are enrolled, the Superintendent may not apply a positive growth adjustment.
- (5)(a) The Superintendent shall apply a negative growth adjustment to a charter school's base for decline in special education ADM.
- (b) The negative growth adjustment is the base multiplied by the percentage of enrollment decline.
- (c) The Superintendent shall subtract the result calculated under Subsection (5)(b) from the base to determine WPU.
- (d) When there is no decline in a charter school's enrollment of students with disabilities, either because the charter school is new or because the same number of students are enrolled, the Superintendent may not apply a negative growth adjustment to the charter school's allotment.
- (e) If a negative growth adjustment brings the WPU below the foundation, the charter school shall receive the foundation WPU.
- (6)(a) If an authorizer approves a significant expansion for a charter school, during the first and second years of expansion, the Superintendent shall apply an additional funding adjustment after the entire add-on WPU formula is calculated.
- (b) After the first and second years of a charter school's expansion, the special education formula provided in this R277-479-3 shall account for the expansion.
- (c) The Superintendent shall calculate a significant expansion adjustment by estimating the number of students with disabilities who will enroll as part of the expansion, and providing funding for these anticipated students.
- (d)(i) The Superintendent shall base the estimate under Subsection (6)(c) on a projected expansion adjustment calculated by the Superintendent accounting for expansion information provided by a charter school's authorizer.

(ii) The Superintendent shall multiply the projection by the prevalence rate of students with disabilities for the charter school for the most recent year calculated in the add-on formula.

(iii) The Superintendent shall allocate the resulting significant expansion adjustment WPU as an expansion supplement to the charter school's add-on WPU.

KEY: charter schools, students with disabilities

August 7, 2017

Notice of Continuation March 15, 2017

Art X, Sec 3

53A-1-402(1)

53A-15-301

53A-1-401

R277. Education, Administration.

R277-484. Data Standards.

R277-484-1. Authority and Purpose.

- (1) This rule is authorized by:
 - (a) Utah Constitution Article X, Section 3, which vests general control and supervision over public education in the Board;
 - (b) Section 53A-1-401, which allows the Board to make rules to execute the Board's duties and responsibilities under the Utah Constitution and state law;
 - (c) Subsection 53A-1-401(8)(a), which allows the Board to take corrective action against an education entity that fails to comply with Board rules; and
 - (d) Subsection 53A-1-413(8), which requires the Board to ensure LEA inclusion of data in an LEA's Student Information System.
- (2) The Superintendent is required to perform certain data collection related duties essential to the operation of statewide educational accountability and financial systems as mandated in state and federal law.
- (3) The purpose of this rule is to support the operation of required educational accountability and financial systems by ensuring timely submission of data by LEAs.

R277-484-2. Definitions.

- (1) "Annual Financial Report" means an account of LEA revenue and expenditures by source and fund sufficient to meet the reporting requirements specified in Subsections 53A-1-301(3)(d) and (e).
- (2) "Annual Program Report" means an account of LEA revenue and expenditures by source and program sufficient to meet the reporting requirements specified in Subsections 53A-1-301(3)(d) and (e).
- (3) "Comprehensive Administration of Credentials for Teachers in Utah Schools" or "CACTUS" means the same as that term is defined in Subsection R277-512(1)(a).
- (4) "Data Warehouse" means the database of demographic information, course taking, and test results maintained by the USOE on all students enrolled in Utah schools.
- (5) "EDEN" means the Education Data Exchange Network, the mechanism by which state education agencies are mandated to submit data to the U.S. Department of Education.
- (6) "LEA" includes, for purposes of this rule, the Utah Schools for the Deaf and the Blind.
- (7) "MSP" means Minimum School Program, the set of state supported K-12 public school funding programs.
- (8) "Schools interoperability framework" or "SIF" means an open global standard for seamless, real time data transfer and usage for Utah public schools.
- (9) "Student achievement backpack" has the same meaning as that term is defined in Subsection 53A-1-413(1)(d).
- (10) "Student information system" or "SIS" means a student data collection system used for Utah public schools.
- (11) "Utah eTranscript and Record Exchange" or "UTREx" means a system that allows individual detailed student records to be exchanged electronically between public education LEAs and the Board, and allows electronic transcripts to be sent to any post-secondary institution, private or public, in-state or out-of-state, that participates in the e-transcript service.
- (12) "Utah Student Record Store" has the same meaning as that term is defined in Subsection 53A-1-413(1)(e).
- (13) "Year" means both the school year and the fiscal year for a Utah LEA, which runs from July 1 through June 30.

R277-484-3. Deadlines for Data Submission.

- (1) An LEA shall submit student level data to the Board through UTREx.
- (2) An LEA shall by 5:00 p.m. Mountain Standard Time on the date specified in Table 1 submit reports in the format

specified by the Superintendent.

(3) If a deadline in Table 1 falls on a weekend or state holiday in a given year, an LEA shall submit the report on the next business day following the date specified in Table 1.

TABLE 1
Reporting Deadlines

Report	Deadline
Adult Education - Final Report - Prior Year	July 15
Adult Education - Final Audit Report - Prior Year	September 15
Annual Assurance Letter - R277-108	October 1
Annual Financial Report - Prior Year	October 1
Annual Program Report - Prior Year	October 1
Bus Driver Credentials Report - Current Year	December 15
Bus Inventory Report	July 15
CACTUS - Final Update - Current Year	June 29
CACTUS - Midyear Update - Current Year	November 15
Charter School Projections	September 15
Classified Personnel Report - Prior Year	July 15
Community Development and Renewal Agency Representative List	February 28
Driver Education Report - Prior Year	July 15
Emergency Preparedness Compliance Statement - Prior Year	July 1
Emergency Response Plan - Prior Year	July 1
Enrollment and Transfer Student Documentation Audit - Current Year	November 1
ESEA Choice and Supplemental Services Report - Prior Year	July 15
Financial Audit Report - Prior Year	November 30
Fire Drill Compliance Statement - Prior Year	July 1
Free and Reduced Price Lunch October 31 Enrollment Survey - Current Year	November 15
Home Schooled Students Report - Prior Year	July 15
Immunization Status Report (to Utah Department of Health) - Final	June 15
Immunization Status Report - Current Year	November 1
LEA Budget - Next Fiscal Year	July 15
LEA Budget - Next Fiscal Year - Planned Truth in Taxation Process	August 15
Membership Audit Report - Prior Year	September 15
Negotiations Report - Current Year	November 1
Other Emergency (Earthquake and School Violence) Drills Compliance Statement - Prior Year	July 1
Pupil Transportation - Schedule A1 (Miles, Minutes, Students Report) - Current Year Projected	November 1
Pupil Transportation Schedule B (Miscellaneous Expenditure Report) - Prior Year	November 1
Pupil Transportation Statistics Year End Report- Prior Year	July 15
Redevelopment Agency Taxing Entity Committee Representative List	February 28
UTREx - Complete December 1 Update - Current Year	December 10
UTREx - Complete October 1 Update - Current Year	October 10
UTREx - Revised December 1 Update - Current Year - Significant Errors Identified by the Superintendent or LEA	December 15
UTREx - Revised October 1 Update - Current Year	October 15
UTREx - Revised October 1 Update - Significant Errors Identified by the Superintendent or LEA	October 15
UTREx - Final Comprehensive Update - Prior Year	July 7

R277-484-4. Adjustments to Deadlines.

- (1) An LEA may seek an extension of a deadline to ensure continuation of funding and provide more accurate information to allocation formulas by submitting a written request to the Superintendent no later than 24 hours before the specified deadline in Table 1.
- (2) An extension request shall include:
 - (a) The reasons for the extension request;
 - (b) The signatures of the LEA business administrator and superintendent or director; and
 - (c) The date by which the LEA proposes to submit the

report.

(3) If an LEA requests an extension under Subsection (1), the Superintendent may do any of the following after taking into consideration the pattern of LEA compliance with reporting deadlines and the urgency of the need for the data to be submitted:

- (a) Approve the request and allow the MSP fund transfer process to continue; or
- (b) Deny the request and stop the MSP fund transfer process; or

(c) Recommend corrective action to the Board in accordance with Rule R277-114.

(4) If, after receiving an extension, an LEA fails to submit the report by the designated date, the MSP fund transfer process shall be stopped and the procedures described in Section R277-484-7 shall apply.

(5) An extension shall apply only to the specific reports and dates for which an extension was requested.

(6) The Superintendent may not extend deadlines for the following reports:

- (a) AFR;
- (b) APR;
- (c) Mid-year or Final CACTUS updates;
- (d) a Financial Audit Report; or
- (e) any UTREx updates.

R277-484-5. Official Data Source and Required LEA Compatibility.

(1) The Superintendent shall load operational data collections into the Data Warehouse as of the submission deadlines specified.

(2) The Data Warehouse shall be the sole official source of data for annual:

- (a) school performance reports required under Section 53A-3-602.5;
- (b) determination of state and federal accountability reports; and
- (c) submission of data files to the U.S. Department of Education via EDEN.

(3)(a) An LEA shall use an SIS approved by the Superintendent to ensure compatibility with Board data collection systems.

(b) The Superintendent shall maintain a list of approved student information systems.

(4) Prior to the Superintendent granting approval for an LEA to initiate or replace a student information system that was not previously approved, the LEA shall:

- (a) send written request for approval to the Superintendent no later than November 15 of the year prior to the year the LEA proposes to use the SIS for production software;
- (b) submit documentation to the Superintendent that the new or modified student information system is SIF certified;
- (c) submit documentation to the Superintendent that an SIF agent can meet the UTREx specifications profile for Vertical Reporting Framework (VRF) and eTranscripts;
- (d) ensure that a new student information system can generate valid data collection by submitting an actual file to the Superintendent for review;
- (e) ensure that the new student information system can generate the Statewide Student Identifier (SSID) request file by submitting an actual file to the Superintendent for review.

(5)(a) The Superintendent shall review documentation and grant or deny an LEA submission under Subsection (4) within 30 calendar days.

(b) An approved replacement system shall run in parallel to a state-approved system for a period of at least three months and be able to generate duplicate reports to previously generated information.

(6) An LEA shall submit daily updates to the Board

Clearinghouse using all School Interoperability Framework (SIF) objects defined in the UTREx Clearinghouse specification.

(7) An LEA shall electronically submit all public high school transcripts requested by a public education post-secondary school if the post-secondary school is capable of receiving transcripts through the electronic transcript service designated by the Superintendent.

(8) No later than June 30, 2017, an LEA shall ensure that data collected in the Utah Student Record Store for a Student Achievement Backpack is integrated into the LEA's SIS and is made available to a student's parent or guardian and an authorized LEA user in an easily accessible viewing format.

(9) Failure to comply with any of the requirements of this Section R277-484-5 may result in a recommendation for corrective action in accordance with Rule R277-114.

R277-484-6. Adjustments to Summary Statistics Based on Compliance Audits.

(1) For the purpose of allocating MSP funds and projecting enrollment, the Superintendent may modify LEA level aggregate membership and fall enrollment counts on the basis of the values in the Membership and Enrollment audit reports, respectively, when an audit report review team agrees that an adjustment is warranted by the evidence of an audit.

(2) An audit report review team shall make a determination under Subsection (1) within 60 working days of the authorized audit report deadline.

(3) The Superintendent may only adjust values downward if an audit report is received after an authorized deadline.

R277-484-7. Financial Consequences of Failure to Submit Reports on Time.

(1) If an LEA fails to submit a report by its deadline as specified in Table 1, consistent with procedures outlined in R277-114, the Superintendent may recommend corrective action, including stopping the LEA's MSP funds transfer process, unless the LEA has obtained an extension of the deadline in accordance with the procedure described in Section R277-484-4.

(2) The Superintendent may recommend loss of up to 1.0 WPU from Kindergarten and Grades 1-12 programs, depending on the grade level and aggregate membership of the student, in the current year Mid Year Update for each student whose prior year immunization status was not accounted for in accordance with Utah Code 53A-11-301 as of June 15.

KEY: data standards, reports, deadlines August 7, 2017

Notice of Continuation June 6, 2017
53A-1-301(3)(d) and (e)
53A-1-401
53A-1-401(8)(a)
53A-1-413(8)

Art X Sec 3

R277. Education, Administration.**R277-485. Loss of Enrollment.****R277-485-1. Authority and Purpose.**

(1) This rule is authorized by:

(a) Utah Constitution Article X, Section 3, which vests general control and supervision over public education in the Board;

(b) Section 53A-1-401, which allows the Board to make rules to execute the Board's duties and responsibilities under the Utah Constitution and state law; and

(c) Section 53A-17a-139, which allows the Board to increase funds for a school district in order to avoid penalizing it for an excessive loss in student enrollment due to factors beyond its control.

(2) The purpose of this rule is to establish guidelines for funding under Section 53A-17a-139.

R277-485-2. Definitions.

(1) "ADM" means average daily membership derived from end-of-year data.

(2) "Carryforward balance" means the unobligated amount of MSP basic program education funds from the previous fiscal year.

(3) "Historical Mean ADM" means the mean of the two highest ADMs in the three years preceding the prior year.

(4) "Local Effort" means the prior year sum of tax rates imposed by the local school board.

(5) "Lost ADM" means the difference between prior year ADM and Historical Mean ADM.

(6) "Mid-year update" means the annual Minimum School Program allocation report prepared by the Superintendent by January 1 annually.

(7) "Minimum School Program" or "MSP" means the state supported Minimum School Program as defined in Title 53A, Chapter 17a.

(8) "Weighted Pupil Unit" or "WPU" means the unit of measure of factors that is computed in accordance with the MSP for the purpose of determining the costs of a program on a uniform basis for each district.

R277-485-3. Eligibility.

(1) A school district may receive funding under this rule if the district's lost ADM is at least four percent less than the district's historical mean ADM.

(2) A school district that seeks funding under this rule shall file a petition with the Superintendent no later than September 15 that demonstrates that a loss of enrollment occurred due to unpredictable factors beyond the district's control.

(3) The Superintendent shall refer a petition filed in accordance with Subsection (2) to the Finance Committee to review and make a recommendation to the Board.

(4) A charter school may not receive funding under this rule.

R277-485-4. Funding.

(1) The Superintendent shall allocate funding to an eligible district under Subsection R277-485-3(1) using the unencumbered MSP carryforward balance.

(2) The Superintendent may only award funds to a district under this rule after all other authorized uses of the carryforward balance have been carried out.

(3) The total amount of funds made available for distribution shall be equal to the lesser of:

(a) the sum of lost ADM in eligible districts multiplied by 25 percent of the current year value of the WPU; or

(b) 25 percent of the current unencumbered MSP carryforward balance.

(4) The Superintendent shall distribute available funds in

proportion to lost ADM (90 percent) and prior year local effort (10 percent) among eligible districts.

(5) The Superintendent may not fund an eligible district if there are not any current year unencumbered MSP funds.

(6) The Superintendent shall distribute funds annually in one lump sum with the mid-year update of the current year MSP.

KEY: students, enrollment

August 7, 2017

Notice of Continuation June 6, 2017

Art X Sec 3

53A-1-401

53A-17a-139

R277. Education, Administration.**R277-488. Critical Languages and Dual Language Immersion Program.****R277-488-1. Authority and Purpose.**

- (1) This rule is authorized by:
- (a) Utah Constitution Article X, Section 3, which vests general control and supervision over public education in the Board;
- (b) Section 53A-15-104, which requires the Board to establish a Critical Languages Program;
- (c) Section 53A-15-105, which requires the Board to establish a Dual Language Immersion program; and
- (d) Section 53A-1-401, which allows the Board to make rules to execute the Board's duties and responsibilities under the Utah Constitution and state law.
- (2) The purpose of this rule is to:
- (a) establish criteria and procedures for distributing funds to elementary and secondary schools participating in the Dual Language Immersion Program and Critical Languages Program;
- (b) increase the number of students who reach proficiency in world languages;
- (c) build overall world language capacity in the state of Utah; and
- (d) increase the number of biliterate and bilingual students.

R277-488-2. Definitions.

- (1) "Critical languages" means those languages described under Section 53A-15-104(1).
- (2) "Critical Languages Program" means the program described under Section 53A-15-104.
- (3) "Dual language immersion" or "DLI" means a distinctive dual language education program in which native English speakers and active speakers of another language are integrated for academic content.
- (4) "Secondary school" means grades 7-12 in whatever schools the grade levels exist.

R277-488-3. Critical Language Program Requirements.

- (1) A secondary school that desires to offer critical languages, through traditional instruction or a visiting guest teacher program, shall submit an application, to the Superintendent no later than May 1.
- (2) An LEA application shall be on a form provided by the Superintendent annually by April 1, which shall designate:
- (a) the name of the school district or charter school;
- (b) a plan and procedure to notify students and parents of the names of the critical languages that will support the dual language immersion continuation into secondary schools consistent with Subsection 53A-15-104(1); and
- (c) requirements for the visiting guest teacher exchange program, including:
- (i) programs shall operate under a Memorandum of Understanding between the Board and the country providing qualified guest teachers;
- (ii) international teacher expenses shall be paid as provided by the designated Memorandum of Understanding; and
- (iii) satisfaction of all other conditions provided by individual Memoranda of Understanding.
- (3) A school applying for either the traditional instruction or the visiting guest teacher program shall use materials identified and recommended by the Superintendent, including texts and consumables, purchased with funds appropriated by the Legislature.

R277-488-4. Dual Language Immersion Program Requirements.

- (1) The Superintendent shall disburse DLI program funds by July 1 of each fiscal year subject to state appropriation.
- (2) The DLI program shall support world languages

approved by the Superintendent.

(3) The Superintendent shall provide an application for an LEA to receive funding for DLI programs by April 14 annually.

(4) An LEA shall submit an application described in Subsection (3) no later than May 14 annually to be considered for elementary and secondary school DLI program funding in the subsequent school year.

(5) An application for DLI program funds shall include a plan that includes:

- (a) 50 percent of instruction in English and 50 percent of instruction in another language;
- (b) an instructional model identified in R277-488-2(4)(b);
- (c) a language approved by the Superintendent;
- (d) a timeline that begins the instructional model in kindergarten or grade 1, and adds an additional grade each year; and
- (e) a plan and procedure in place to notify students and parents of the availability of at least one DLI course.

(6) The Superintendent shall give priority in DLI program funding to an LEA that:

- (a) does not currently teach the requested language choice;
- (b) demonstrates adequate local funding and infrastructure to begin a program or expand existing programs;
- (c) demonstrates community interest and students committed and prepared to participate in a new or expanded program, including prepared instructors for the program;
- (d) has adequate interest, resources, and infrastructure, but does not presently have a DLI program; and
- (e) has a demonstrated community need for improved or expanded world language instruction in a specific school or community.

(7) A school receiving DLI program funds shall hire qualified language teachers who:

- (a) have a world language endorsement in the language of instruction and a DLI endorsement; and
- (b) are Utah licensed elementary or secondary educators.

R277-488-5. Dual Language Immersion Funds.

(1) Secondary and elementary schools shall be selected for funding for the DLI program based on an evaluation of applications by the Superintendent.

(2) The Superintendent shall make an award to an individual elementary or secondary school and allocate funds to the school's LEA to be fully distributed to the school based on the annual legislative funding allocation.

(3) The Superintendent shall notify a new school eligible for funding of a funds award for the subsequent fiscal year by June 1 annually.

R277-488-6. Evaluation and Reports.

(1) Each school selected for funding shall submit an annual evaluation report to the Superintendent.

(2) The Superintendent may request additional data from a secondary or elementary school that receives funding.

KEY: critical languages, dual language immersion

August 7, 2017

Notice of Continuation June 6, 2017

Art X Sec 3

53A-15-104

53A-15-105

53A-1-401

R277. Education, Administration.**R277-489. Early Intervention Program.****R277-489-1. Authority and Purpose.**

- (1) This rule is authorized by:
 - (a) Utah Constitution Article X, Section 3, which vests general control and supervision over public education in the Board;
 - (b) Section 53A-1-401, which allows the Board to make rules to execute the Board's duties and responsibilities under the Utah constitution and state law; and
 - (c) Section 53A-17a-167, which directs the Board to distribute funds appropriated for the early intervention program and k-3 reading software program to LEAs that apply for the funds.
- (2) The purpose of this rule is to establish criteria and procedures to administer the early intervention program and the k-3 reading software program.

R277-489-2. Definitions.

- (1) "Adaptive learning technology and assessments" means technology tools and software that adjust the presentation of educational material according to a student's weaknesses and strengths, as indicated by the student's responses to questions.
- (2) "Early intervention program" means a program that provides additional instruction to kindergarten age students:
 - (a) as an extended period before or after school, on Saturdays, or during the summer; or
 - (b) through other means.
- (3) "Enrollment" means class enrollment of not more than the student enrollment of other kindergarten classes within the school.
- (4) "LEA plan" means the early intervention program plan submitted by an LEA and approved and accepted for funding by the Superintendent.

R277-489-3. Early Intervention Program.

- (1) The Superintendent shall accept applications from LEAs for early intervention programs delivered through enhanced kindergarten programs that satisfy the requirements of Section 53A-17a-167 and the provisions of this rule.
- (2) The Superintendent shall establish timelines for submission of applications.
- (3) An LEA application for early intervention program funds shall include:
 - (a) the names of schools for which program funds must be used;
 - (b) a description of the delivery methods that may be used to serve eligible students, such as:
 - (i) full-day kindergarten;
 - (ii) two half-days;
 - (iii) extra hours;
 - (iv) a summer program; or
 - (v) other means;
 - (c) a description of the evidence-based early intervention model used by the LEA;
 - (d) a description of how the program focuses on age-appropriate literacy and numeracy skills;
 - (e) a description of how the program targets at-risk students;
 - (f) a description of the assessment procedures and tools to be used by participating schools within the LEA; and
 - (g) other information as requested by the Superintendent and approved by the Board.
- (4) The Superintendent shall distribute funds to eligible charter schools based on a formula identifying the percentage of students in public schools and the percentage of students with the greatest need for an enhanced kindergarten program consistent with Subsection 53A-17a-167(4)(a).
- (5) The Superintendent shall distribute funds to eligible

school districts by determining the number of students eligible to receive free lunch in the prior school year for each school district and prorating the remaining funds based on the number of students eligible to receive free lunch in each school district.

(6) The Superintendent shall establish timelines for distribution of early intervention program funds.

(7) The Superintendent shall require all funded programs to:

- (a) conduct entry and exit assessments;
 - (b) submit data as required by Section R277-489-5; and
 - (c) submit an annual report.
- (8) An LEA may not require a student to participate in an early intervention program.

R277-489-4. Adaptive Learning Technology Grants.

(1) The Superintendent shall select one or more technology providers through an RFP to provide adaptive learning technology and assessments for reading for students in kindergarten through grade 3.

(2)(a) An LEA may apply for a grant for adaptive learning technology and assessments for reading for students in kindergarten through grade 3.

(b) An LEA that receive a license for adaptive learning technology in a previous school year shall be given a priority to receive an equivalent license in subsequent years.

(c) An LEA receiving funding for adaptive learning technology shall:

- (i) conduct entry and exit assessments of participating students; and
- (ii) submit an annual report that assesses the impact of the adaptive learning technology and assessments or adaptive computer programs for literacy instruction used by the LEA, including final testing data and student learning gain scores.

(3) The Superintendent shall report final testing data and student learning scores regarding adaptive learning technology and assessments or adaptive computer programs for literacy instruction by November 1 annually to the Education Interim Committee and the Governor.

R277-489-5. Assessment, Accountability and Reporting.

(1) An LEA shall use a state mandated uniform kindergarten entry assessment, approved by the Superintendent, with all kindergarten students.

(2) The days used for assessment shall be consistent with Subsection R277-419-11(3)(e).

(3) An LEA shall conduct an entry assessment within an administration window that is three weeks prior to the first day of school and within the first three weeks of kindergarten starting.

(4) An LEA shall submit entry assessment data to the Data Gateway by September 30 annually.

(5) An LEA shall complete a state-mandated exit assessment, approved by the Superintendent, during the last four weeks prior to the ending of the school year and report the results to the Superintendent by June 15 annually.

(5) The Superintendent may recommend action to the Board, including withholding of funds, in accordance with Rule R277-114 for an LEA that fails to provide complete, accurate, and timely reporting as required by this rule.

(6) A charter school, which does not receive early intervention program funds or k-3 reading software funds, is not subject to the assessment and reporting requirements of this Section R277-489-5.

R277-489-6. Use of Entry and Exit Assessment Data.

(1) The Superintendent or an LEA may use entry and exit assessment data obtained in accordance with Section R277-489-5 to:

- (a) provide insights into current levels of academic and

social emotional performance upon entry and exit of kindergarten;

(b) identify students in need of early intervention instruction and promote differentiated instruction for all students;

(c) understand the effectiveness of programs, such as extended-day kindergarten and pre-school;

(d) provide opportunities for data data-informed decision making and cost-benefit analysis of early learning initiatives;

(e) identify effective instructional practices or strategies for improving student achievement outcomes in a targeted manner; and

(f) understand the influence and impact of full-day kindergarten on at-risk students in both the short- and long-term.

(2) An LEA may not use entry and exit assessment data obtained in accordance with Section R277-489-5 to:

(a) justify early enrollment of a student who is not currently eligible to enroll in kindergarten, such as a student with a birthday falling after September 1;

(b) evaluate an educator's teaching performance; or

(c) determine whether a student should be retained or promoted between grades.

KEY: early intervention

August 7, 2017

Notice of Continuation June 6, 2017

Art X Sec 3

53A-1-401

53A-17a-167

R277. Education, Administration.**R277-493. Kindergarten Supplemental Enrichment Program.****R277-493-1. Authority and Purpose.**

(1) This rule is authorized by:

(a) Article X, Section 3 of the Utah Constitution, which vests general control and supervision over public education in the Board;

(b) Section 53A-1-401, which allows the Board to make rules to execute the Board's duties and responsibilities under the Utah Constitution and state law; and

(c) Subsection 53A-15-2003(6), which directs the Board to adopt rules to implement the kindergarten supplemental enrichment program.

(2) The purpose of this rule is to make rules to establish reporting procedures and administer Title 53A, Chapter 15, Part 20, Kindergarten Supplemental Enrichment Program.

R277-493-2. Definitions.

(1)(a) "Eligible school" has the same meaning as defined in Subsection 53A-15-2002(2).

(b) "Eligible school" does not include a school that receives funds under Section 53A-17a-167.

(2) "Kindergarten supplemental enrichment program" has the same meaning as defined in Subsection 53A-15-2002(4).

R277-493-3. Program Administration.

(1) An LEA with an eligible school may apply for kindergarten supplemental enrichment program by filing a grant application following a form approved by the Superintendent no later than May 15 annually.

(2) An application filed in accordance with Subsection (1) shall include:

(a) evidence of an eligible school's overall need for a kindergarten supplemental enrichment program based on the results of the eligible school's current kindergarten entry assessments and programming;

(b) a description of how the eligible school will use the Board approved uniform entry assessment to determine which students to target for the kindergarten supplemental enrichment program;

(c) a description of how the eligible school's program will coordinate with the Superintendent and LEA personnel to meet the annual reporting requirements of this rule;

(d) a description of how the eligible school will use funds to meet the requirements of Subsection 53A-15-2003(3);

(e) if an eligible school is applying based on their percentage of students experiencing intergenerational poverty, a description of the learning strategies the school will employ to design and implement a program that is developed with the unique needs of students experiencing intergenerational poverty in mind; and

(f) other information as requested by the Superintendent.

(3) If an eligible school has previously received funding through the kindergarten supplemental enrichment program, an application under Subsection (1) shall also include data from Board entry and exit exams to establish success in changing student outcomes in comparison to similarly situated peers who weren't able to receive the benefit of the kindergarten supplemental enrichment program.

(4) The Superintendent shall recommend distribution of funds by the Board in accordance with Subsection 53A-15-2003(1)(a).

(5) An eligible school that receives kindergarten supplemental enrichment program funds shall comply with the assessment and reporting requirements of Section R277-489-5.

(6) The Superintendent shall require an eligible school that receives funds in accordance with this rule to demonstrate compliance with federal supplanting requirements.

KEY: kindergarten, supplementals, enrichments

August 7, 2017

Art X Sec 3

53A-1-401

53A-15-2003(6)

R277. Education, Administration.**R277-514. Deaf Education in Public Schools.****R277-514-1. Authority and Purpose.**

(1) This rule is authorized by:

(a) Utah Constitution Article X, Section 3, which vests general control and supervision over public education in the Board;

(b) Section 53A-1-401, which allows the Board to make rules to execute the Board's duties and responsibilities under the Utah Constitution and state law; and

(c) Subsection 53A-1-402(1)(a), which requires the Board to establish the qualification and certification of educators.

(2) The purpose of this rule is to specify the requirements for Deaf Education licensing.

R277-514-2. Deaf Education (Birth to Age 22) License Area of Concentration.

(1) A deaf education (birth to age 22) license area of concentration permits an educator to teach a class composed of deaf and hard of hearing students from birth to age 22 if the educator holds the appropriate endorsement as described in R277-520-4.

(2) The Board may approve an application for a Deaf Education license area of concentration if the applicant:

(a)(i) completes a deaf education teacher preparation program approved by the Board as described in Section R277-514-3; or

(ii) holds a valid deaf education license issued by a state other than Utah under the National Association of State Directors of Teacher Education and Certification Interstate Agreement;

(b) passes a deaf education competency exam approved by the Board;

(c) has met the requirements of at least one of the following endorsements:

(i) Listening and Spoken Language endorsement, which indicates that the endorsement holder's preparation focused on teaching deaf and hard of hearing students with listening and spoken language strategies; or

(ii) ASL/English-bilingual/bicultural endorsement, which indicates that the endorsement holder's preparation focused on strategies that promote the development of American Sign Language and English literacy across the curriculum; and

(d) if the applicant intends to teach in grades six through twelve, has met the requirements of at least one content specific area endorsement.

R277-514-3. Deaf Education Program.

The Board may approve an institution of higher education's deaf education teacher preparation program if the program includes course work specifically designed to train candidates to:

(1) understand the legal and ethical issues surrounding deaf education;

(2) comply with:

(a) the Individuals with Disabilities Education Act of 2004, Pub. L. No. 108-446; and

(b) Board rule;

(3) address specific linguistic and cultural needs of deaf and hard of hearing students throughout the curriculum;

(4) demonstrate techniques for incorporating language into all aspects of the curriculum;

(5) demonstrate pedagogical skills unique to teaching reading, writing, math and other content areas to deaf and hard of hearing students;

(6) demonstrate basic fluency in the use of American Sign Language;

(7) understand audiological and physiological components of audition;

(8) understand techniques for teaching speech to deaf and hard of hearing students;

(9) understand the socio-cultural and psychological implications of hearing loss; and

(10) assess and address the educational needs and educational progress of deaf and hard of hearing students.

**KEY: licensing, deaf education
August 7, 2017**

**Art X Sec 3
53A-1-401
53A-1-402**

R277. Education, Administration.**R277-520. Appropriate Licensing and Assignment of Teachers.****R277-520-1. Authority and Purpose.**

- (1) This rule is authorized by:
- Utah Constitution Article X, Section 3, which vests general control and supervision over public education in the Board;
 - Section 53A-1-401, which allows the Board to make rules to execute the Board's duties and responsibilities under the Utah Constitution and state law; and
 - Subsection 53A-6-104(2)(a), which authorizes the Board to rank, endorse, or classify licenses.
- (2) The purpose of this rule is to provide criteria for:
- local school boards to employ educators in appropriate assignments;
 - the Board to provide state funding to local school boards for appropriately qualified and assigned staff; and
 - the Board and local school boards to satisfy the requirements of ESEA in order for local school boards to receive federal funds.

R277-520-2. Definitions.

- (1) "Content specialist" means a licensed educator who provides instruction or specialized support for students and teachers in a school setting.
- (2) "Core academic subjects or areas" under the Elementary and Secondary Education Act (ESEA), Title IX, Part A, 20 U.S.C. 7801, Section 9101(11) means:
- English;
 - reading or language arts;
 - mathematics;
 - science;
 - foreign languages;
 - civics and government;
 - economics;
 - arts;
 - history; and
 - geography.
- (3) "Demonstrated competency" means that a teacher shall demonstrate current expertise to teach a specific class or course through the use of lines of evidence which may include:
- completed Board approved course work;
 - content tests; or
 - years of successful experience including evidence of student performance.
- (4) "Eminence" means distinguished ability in rank, in attainment of superior knowledge and skill in comparison with the generally accepted standards and achievements in the area in which the authorization is sought as provided in R277-520-5.
- (5) "Letter of authorization" means a designation given to an individual for one year, such as an out-of-state candidate or individual pursuing an alternative license, who has not completed the requirements for a Level 1, 2, or 3 license or who has not completed necessary endorsement requirements and who is employed by an LEA.
- (6) "Level 1 license" means:
- a Utah professional educator license issued upon completion of an approved preparation program or an alternative preparation program; or
 - pursuant to an agreement under the NASDTEC Interstate Agreement, to candidates who have also met all ancillary requirements established by law or rule.
- (7) "Level 2 license" means a Utah professional educator license issued to an applicant after the Level 2 applicant:
- completes all requirements for a Level 1 license;
 - completes the requirements under R277-522 for a teacher whose employment as a Level 1 licensed educator began after January 1, 2003 in a Utah public or accredited private

school;

- completes:
 - at least three years of successful education experience in a Utah public LEA or accredited private school; or
 - (A) one year of successful education experience in a Utah public LEA or accredited private school; and (B) at least three years of successful education experience in a public LEA or accredited private school outside of Utah; and
 - completes additional requirements established by law or rule.
- (8) "Level 3 license" means a Utah professional educator license issued to an educator who:
- holds a current Utah Level 2 license; and
 - receives:
 - National Board Certification;
 - a doctorate in:
 - education; or
 - a field related to a content area in a unit of the public education system or an accredited private school; or
 - (A) a Speech-Language Pathology area of concentration; and (B) currently holds American Speech-Language Hearing Association (ASHA) certification.
- (9)(a) "License areas of concentration" means a designation to a license obtained by completing an approved preparation program or an alternative preparation program in a specific area of educational studies that may include:
- Early Childhood (k-3);
 - Elementary (k-6);
 - Elementary 1-8;
 - Middle (still valid, but not issued after 1988, 5-9);
 - Secondary (6-12);
 - Administrative/Supervisory (k-12);
 - Career and Technical Education;
 - School Counselor;
 - School Psychologist;
 - School Social Worker;
 - Special Education (k-12);
 - Preschool Special Education (birth-age 5);
 - Communication Disorders;
 - Speech-Language Pathologist; and
 - Speech-Language Technician.
- (b) License areas of concentration may also bear endorsements relating to subjects or specific assignments.
- (10)(a) "License endorsement" or "endorsement" means a specialty field or area earned through completing required course work established by the Board or through demonstrated competency approved by the Board;
- (b) The endorsement shall be listed on the Professional Educator License indicating the specific qualification of the holder.
- (11) "Professional staff cost program funds" means funding provided to school districts based on the percentage of a district's professional staff that is appropriately licensed in the areas in which staff members teach.
- (12) "SAEP" means State Approved Endorsement Program. This identifies an educator working on a professional development plan to obtain an endorsement.

R277-520-3. Required Licensing.

- (1) All teachers in public schools shall hold a Utah educator license along with appropriate areas of concentration and endorsements.
- (2) An LEA shall receive assistance from the Superintendent to the extent of resources available to have all teachers fully licensed.
- (3) An LEA is expected to hire teachers who are licensed or in the process of becoming fully licensed and endorsed.

(4) Failure to ensure that an educator has appropriate licensure may result in the Board withholding all LEA funds related to salary supplements under Section 53A-17a-153 and R277-110 and educator quality under Subsection 53A-17a-107(2) and R277-486 until teachers are appropriately licensed pursuant to the Board's authority under Section 53A-1-401.

R277-520-4. Appropriate Licenses with Areas of Concentration and Endorsements.

(1) An educator assigned to teach a class in kindergarten through grade 3 shall hold a current Utah Educator License with:

- (a) an early childhood (k-3) license area of concentration;
- (b) an elementary (k-6) license area of concentration;
- (c) for an educator assigned to teach a class in grade 1 through grade 3, an elementary (1-8) license area of concentration; or

(d) for an educator assigned to teach a class composed of deaf and hard of hearing students, a deaf education (birth-age 22) license area of concentration.

(2) An educator assigned to teach a class in grade 4 through grade 8 in an elementary setting shall hold a current Utah Educator License with:

(a) an elementary (k-6) or an elementary (1-8) license area of concentration; or

(b) for an educator assigned to teach a class composed of deaf and hard of hearing students, a deaf education (birth-age 22) license area of concentration.

(3) An elementary content specialist in Fine Arts or Physical Education shall hold a current Utah Educator License with an elementary or secondary license area of concentration with the appropriate K-12 content endorsement.

(4) An elementary content specialist in reading or English as a Second Language shall hold a current Utah Educator License with an elementary or secondary license area of concentration with the appropriate subject/content endorsement.

(5) An educator assigned to teach a class in grade 6 through grade 8, including middle-level, intermediate, and junior high schools, shall hold a current Utah Educator License with:

(a) an elementary (1-8) or a secondary (6-12) license area of concentration with the appropriate subject/content endorsement for all assigned courses; or

(b) for an educator assigned to teach a class composed of deaf and hard of hearing students, a deaf education (birth-age 22) license area of concentration with the appropriate subject or content endorsement for all assigned courses.

(6) An educator assigned to teach a class in grade 9 through grade 12 shall hold a current Utah Educator License with:

(a) a secondary (6-12) or a career and technical education license area of concentration with the appropriate subject/content endorsement for all assigned courses; or

(b) for an educator assigned to teach a class composed of deaf and hard of hearing students, a deaf education (birth-age 22) license area of concentration with the appropriate subject or content endorsement for all assigned courses.

(7) An educator assigned to serve or teach a class of students with disabilities shall hold a current Utah Educator License with a special education (k-12) license area of concentration and, if the educator is the teacher of record of secondary mathematics for students with disabilities, shall also hold the appropriate subject/content endorsement.

(8) An educator assigned to serve preschool-aged students with disabilities shall hold a current Utah Educator License with a preschool special education (birth-age 5) license area of concentration.

(9) An educator assigned to serve deaf and hard of hearing students shall hold:

(a) a current Utah Educator License with a special education (k-12) license area of concentration and deaf and hard of hearing endorsement; or

(b) a deaf education (birth-age 22) license area of concentration.

(10) An educator assigned to provide student support services as defined in Rule R277-506 shall hold a current Utah Educator License with the appropriate support service license area of concentration.

(11) An educator assigned as a school-based or LEA-based specialist shall hold a current Utah Educator License with the appropriate license area of concentration and endorsement as defined by the LEA.

(12) An educator assigned in an administrative position requiring an educator license, as defined by the district, shall hold a current Utah Educator License and an administrative/supervisory (k-12) license area of concentration.

(a) A superintendent of a school district may be licensed with a letter of authorization granted by the Board consistent with Section 53A-3-301.

(b) An educator assigned in an administrative position in a charter schools is exempt from this requirement consistent with Section 53A-1a-511.

R277-520-5. Eminence.

(1) The purpose of an eminence authorization is to allow individuals with exceptional training or expertise, consistent with Subsection R277-520-2(4), to teach or work in the public schools on a limited basis.

(2) Documentation of the exceptional training, skills or expertise may be required by the Superintendent prior to the approval of the eminence authorization.

(3) Teachers with an eminence authorization may teach no more than 37% of the regular instructional load except as provided in Subsection (4).

(4) In identified circumstances, teachers with an eminence authorization may teach more than 37% of the regular instructional load.

(5) The Board may approve an eminence authorization if the LEA can find no other qualified individual to fill the position, then:

(a) the LEA shall submit the following documented information to the Superintendent annually:

- (i) description;
- (ii) recruitment efforts;
- (iii) the qualifications of all applicants; and
- (iv) the LEA's rationale for hiring the individual;

(b) the Superintendent shall review the information within 15 days of receipt;

(c) the Superintendent shall notify the individual and the LEA if the Superintendent approves the documented information;

(d) the LEA shall submit a request for a Letter of Authorization to the Board for the individual through normal administrative procedures; or

(6) An individual has exceptional skills, expertise, and experience that make the individual the primary candidate for the position, then:

(a) the LEA shall submit the following documented information to the Superintendent annually:

- (i) information about the position;
- (ii) the individual's expertise, and experience; and
- (iii) the LEA's rationale for hiring the individual.

(b) the Superintendent shall review the information within 15 days of receipt.

(c) the Superintendent shall notify the individual and the LEA if the Superintendent approves the documented information.

(d) the LEA shall submit a request for a Letter of

Authorization to the Board for the individual through normal administrative procedures.

(7) An LEA shall require an individual teaching with an eminence authorization to have a criminal background check consistent with Section 53A-3-410 prior to employment by the LEA.

(8) An LEA that employs the teacher with an eminence authorization shall determine the amount and type of professional development required of the teacher.

(9) An LEA that employs a teacher with an eminence authorization shall apply for renewal of the authorization annually.

(10) An eminence authorization may apply to:

(a) an individual without a teaching license; or

(b) an unusual and infrequent teacher situation where a license-holder is needed to teach in a subject area for which the license-holder is not endorsed, but in which the license-holder may be eminently qualified.

R277-520-6. Routes to Appropriate Endorsements for Teachers.

(1) An educator may add an endorsement to an existing license area of concentration by completing the endorsement requirements established by the Board.

(2) An endorsement requirement in a core academic subject area shall include passage of a Board-approved content knowledge assessment.

(3) A teacher may demonstrate competency in subject areas of the teacher's teaching assignment as approved by the Superintendent to meet specific endorsement requirements except the Board approved content knowledge assessment.

(4) An educator shall be properly endorsed consistent with Section R277-520-3 or have a Board approved SAEP. Otherwise, the Board may withhold professional staff cost program funds pursuant to the Board's authority under Section 53A-1-401(3).

R277-520-7. Board-Approved Endorsement Program (SAEP).

(1) An educator assigned to teach in a subject for which the educator does not hold the appropriate endorsement and who has successfully completed at least 9 semester credit hours of the endorsement requirements shall be placed on an SAEP as determined by the Superintendent.

(2) An individuals participating in an SAEP shall demonstrate progress toward completion of the required endorsements annually, as determined jointly by the LEA and the Superintendent.

(3) An SAEP may be granted for one two-year period and may be extended by the Superintendent for up to 2 additional years if the individual has made progress towards completing the SAEP.

(4) An individual currently participating in an SAEP is considered to hold the endorsement for the purposes of meeting the requirements of Section R277-520-4.

R277-520-8. Background Check Requirement and Withholding of State Funds for Non-Compliance.

(1) An educators qualified under any provision of this R277-520 shall also satisfy the criminal background requirement of Section 53A-3-410 prior to unsupervised access to students.

(2) If an LEA does not appropriately employ and assign teachers consistent with this R277-520, the LEA may have state appropriated professional staff cost program funds withheld pursuant to R277-486, Professional Staff Cost Formula, pursuant to the Board's authority under Section 53A-1-401.

**KEY: educators, licenses, assignments
August 7, 2017**

Art X Sec 3

Notice of Continuation June 6, 2017

**53A-1-401
53A-6-104(2)(a)**

R277. Education, Administration.**R277-531. Public Educator Evaluation Requirements (PEER).****R277-531-1. Authority and Purpose.**

(1) This rule is authorized by:
 (a) Utah Constitution Article X, Section 3, which vests general control and supervision over public education in the Board;

(b) Section 53A-1-401, which allows the Board to make rules to execute the Board's duties and responsibilities under the Utah Constitution and state law;

(c) Subsections 53A-1-402(1)(a)(i) and (ii), which require the Board to establish rules and minimum standards for the qualification and certification of educators and for required school administrative and supervisory services; and

(d) Section 53A-8a-301, which directs that the Board adopt rules to guide school district employee evaluations.

(2) The purpose of this rule is to provide a statewide educator evaluation system framework that includes required Board directed expectations and components and additional school district determined components and procedures to ensure the availability of data about educator effectiveness.

(3) The process shall:

(a) focus on the improvement of high quality instruction and improved student achievement;

(b) include common data that can be aggregated and disaggregated to inform Board and school district decisions about retention, preparation, recruitment, and improved professional learning practices; and

(c) ensure school districts engage in a consistent process statewide of educator evaluation.

R277-531-2. Definitions.

(1) "Educator" means an individual licensed under Section 53A-6-103 and who meets the requirements of Rule R277-502.

(2) "Educator Evaluation Program" means a school district's process, policies, and procedures for evaluating an educator's performance according to the educator's various assignments.

(3) "Formative evaluation" means an evaluation that provides an educator with information and assessments on how to improve the educator's performance.

(4) "Instructional quality data" means data acquired through observation of an educator's instructional practices.

(5) "Joint educator evaluation committee" means the local committee described under Section 53A-8a-403 that develops and assesses a school district evaluation program.

(6) "School administrator" means an educator:

(a) serving in a position that requires a Utah Educator License with an Administrative area of concentration; and

(b) who supervises Level 2 educators.

(7) "Summative evaluation" means an evaluation that is used to make annual decisions or ratings of an educator's performance and may inform decisions on salary, confirmed employment, personnel assignments, transfers, or dismissals.

(9) "Utah Effective Educator Standards" means:

(a) the Effective Teaching Standards established in Section R277-530-5;

(b) the Educational Leadership Standards established in Section R277-530-6; and

(c) the Educational School Counselor Standards established in Section R277-530-7.

(10) "Valid and reliable measurement tool" means an instrument that has proved consistent over time and uses non-subjective criteria that require minimal interpretation.

R277-531-3. Public Educator Evaluation Framework.

(1) The Board provides the public education evaluation framework described in this section, which includes general

evaluation system areas and additional discretionary components required in a school district's educator evaluation system.

(2) A school district shall:

(a) have a joint educator evaluation committee;

(b) base the school district's educator evaluation system on the Utah Effective Educator Standards in Rule R277-530;

(c) establish and articulate performance expectations individually for all licensed school district educators;

(d) use valid and reliable measurement tools including, at a minimum:

(i) observations of instructional quality;

(ii) evidence of student growth;

(iii) parent and student input; and

(iv) other indicators as determined by the school district;

(e) provide an annual rating of educator performance using uniform statewide terminology and definitions, and include summative and formative components;

(f) direct the revision or alignment of all related school district policies, as necessary, to be consistent with the school district Educator Evaluation System;

(g) use valid, reliable, and research-based measurements that shall:

(i) employ a variety of measurement tools;

(ii) measure student growth for educators;

(iii) provide evaluation for non-instructional licensed educators and administrators; and

(h) provide both formative and summative evaluation data.

(3) A school district may consider data gathered from tools to inform decisions about employment and professional learning.

(4) A school district shall discuss and protect the confidentiality of educator data in the evaluation process.

(5)(a) A school district evaluation system shall provide for clear and timely notice to educators of the components, timelines, and consequences of the evaluation process; and

(b) A school district evaluation system shall provide for timely discussion with evaluated educators to include professional growth plans as required in Rule R277-500 and evaluation conferences.

(6) A school district evaluation system shall provide support for instructional improvement, including:

(a) assessing the professional learning needs of educators; and

(b) identifying educators who do not meet expectations for instructional quality and providing support as appropriate at the school district level, which may include providing educators with mentors, coaches, and specialists in effective instruction, and setting timelines and benchmarks to assist educators toward greater improved instructional effectiveness and student achievement.

(7) A school district evaluation system shall maintain records and documentation of required educator evaluation information.

(8) A school district evaluation system shall require the evaluation of all licensed educators at least once a year in accordance with Section R277-533.

(9) A school district evaluation system shall provide at least an annual rating for each licensed educator, including teachers, school administrators, and other non-teaching licensed positions, using Board-directed statewide evaluation terminology and definitions.

(10) A school district evaluation system shall include the following specific educator performance criteria:

(a) school district-determined instructional quality measures;

(b) complete integration of student academic growth score; and

(c) other measures as determined by the school district,

including data required from student or parent input.

(11) A school district evaluation system shall identify potential employment consequences, including discipline and termination, if an educator fails to meet performance expectations.

(12) A school district evaluation system shall include a review or appeals procedure for an educator to challenge the process of a summative evaluation that provides for adequate and timely due process for the educator consistent with Section 53A-8a-406(2).

(13) A school district may include additional components in its evaluation system.

(14) A local board of education shall review and approve its school district's proposed evaluation systems in an open meeting prior to the local board's submission to the Board.

(15) A school district shall report educator effectiveness data to the Superintendent annually, on or before June 30.

R277-531-4. Board Support and Monitoring of LEA Evaluation Systems.

The Superintendent, under supervision of the Board, shall:

(1) develop a model educator evaluation system that includes performance expectations consistent with this rule;

(2) evaluate and recommend tools and measures for use by school districts as they develop and initiate their local educator evaluation systems; and

(3) annually monitor 25% of the school districts' evaluation systems.

R277-531-5. Compensation.

(1) A school district shall implement an employee compensation system, no later than the 2018-19 school year, that is aligned to the school district's educator evaluation system.

(2) An educator's annual advancement on an adopted salary schedule shall be based primarily upon an evaluation system that differentiates among four levels of performance as described in Section 53A-8a-405 and R277-533, unless the educator:

(a) is a provisional educator; or

(b) is in the first year of an assignment, including a new subject, grade level, or school.

KEY: educators, evaluations, requirements

August 7, 2017

Art X Sec 3

Notice of Continuation August 15, 2016 53A-1-402(1)(a)(i)

53A-1-401

R277. Education, Administration.**R277-533. District Educator Evaluation Systems.****R277-533-1. Authority and Purpose.**

- (1) This rule is authorized by:
- (a) Utah Constitution Article X, Section 3, which vests general control and supervision over public education in the Board;
 - (b) Title 53A, Chapter 8a, Part 4, Educator Evaluations, which requires the Board to make rules to establish a framework for the evaluation of educators and set policies and procedures related to educator evaluations; and
 - (c) Section 53A-1-401, which allows the Board to make rules to execute the Board's duties and responsibilities under the Utah Constitution and state law.
- (2) The purpose of this rule is to:
- (a) specify the requirements for district Educator Evaluation Systems Policies;
 - (b) describe the required components of district Educator Evaluation Systems; and
 - (c) establish requirements for how the Annual Summative Educator Evaluation Rating is reported.

R277-533-2. Definitions.

- (1) "Administrator" has the same meaning as that term is defined in Section 53A-8a-102.
- (2) "Certified rater" means an educator who has been trained in evaluating educator performance and has demonstrated competency in using an educator evaluation tool to rate educator effectiveness according to established standards.
- (3) "Educator" has the same meaning as that term is defined in Section 53A-8a-402.
- (4) "Evaluator" means a person who is responsible for an educator's overall evaluation, including:
- (a) professional performance;
 - (b) student growth;
 - (c) stakeholder input; and
 - (d) other indicators of professional improvement.
- (5) "Rater" means a person who conducts an observation of an educator related to an educator's evaluation.
- (6) "School district" includes the Utah Schools for the Deaf and the Blind.
- (7) "System" means a school district's educator evaluation system.

R277-533-3. School District Educator Evaluation Systems.

- (1) A local school board shall adopt a district educator evaluation system in consultation with a joint committee established by the local school board as described in Section 53A-8a-403.
- (2) A district educator evaluation system shall:
- (a) include the components required in Section 53A-8a-405;
 - (b) include the following four differentiated levels of performance:
 - (i) highly effective;
 - (ii) effective;
 - (iii) emerging/minimally effective; and
 - (iv) not effective;
 - (c) use multiple lines of evidence in evaluation, including:
 - (i) professional performance, as described in Section R277-533-4;
 - (ii) student academic growth, as described in Section R277-533-5;
 - (iii) stakeholder input, as described in Section R277-533-5; and
 - (iv) other indicators of professional improvement as required by the school district;
 - (d) provide a process for an educator to request a review of the implementation of the educator's evaluation, as described

in:

- (i) Section 53A-8a-406; and
 - (ii) Section R277-533-8;
- (e) include multiple observations as described in Section R277-533-4; and
- (f) provide a description of the methods for gathering, using, and protecting educator data.
- (3) To form the school district's system, a local school board may adopt:
- (a) the Utah Model Educator Evaluator System established by the Board;
 - (b) an adapted system; or
 - (c) a school district-developed system, consistent with Rules R277-530, R277-531, and this rule.
- (4) An educator is responsible for:
- (a) improving the educator's performance, using resources offered by the school district; and
 - (b) demonstrating acceptable levels of improvement in any designated area of deficiency.

R277-533-4. Evaluators and Standards for Education Observations.

- (1) A school district's system shall include observations.
- (2) The school district shall use observation tools that:
- (a) are aligned with the Utah Effective Educator Standards described in Rule R277-530 at the indicator level; and
 - (b) include multiple supervisor observations at appropriate intervals.
- (3) A school district's evaluation system shall include an opportunity for an educator to contribute additional information to inform their rating at several intervals throughout the process.
- (4) To ensure a valid evaluation system, a school district shall establish a school district rater reliability process that:
- (a) creates standardized ratings established by a committee of expert raters to be used for rater professional development and certification;
 - (b) provides professional development opportunities to all raters and evaluators of licensed educators to:
 - (i) improve a rater or evaluator's abilities; and
 - (ii) give the rater or evaluator an opportunity to demonstrate the rater's abilities to rate an educator in accordance with the Utah Effective Educator Standards described in Rule R277-530;
 - (c) designates qualified raters as certified;
 - (d) assures that an educator is rated by a certified rater;
 - (e) requires a school district to offer a rater opportunities to improve the rater's skills through instruction and practice; and
 - (f) maintains high standards of rater accuracy.

R277-533-5. Student Academic Growth and Stakeholder Input.

- (1) A school district shall ensure that a student academic growth measurement includes the following three required components:
- (a) learning goals measuring long-term outcomes linked to the appropriate specific content knowledge and skills from the Utah Core Standards;
 - (b) assessments; and
 - (c) targets for incremental monitoring of student academic growth.
- (2)(a) A school district's system shall include stakeholder input for educators, principals, and administrators, including annual input from students and parents.
- (b) In addition to the stakeholder input described in Subsection (2)(a), stakeholder input for principals and other administrators shall include input from teachers and support professionals.

R277-533-6. Computing the Annual Summative Rating.

(1) A school district shall base an educator's component ratings on:

(a) actual observations of the educator's performance; and
 (b) educator, evaluator, student academic growth, or other stakeholder data gathered, calculated, or observed that is aligned with standards and rubrics.

(2) A school district shall report summative scores annually for all educators using the following approved terminology for reporting:

- (d) highly effective 3;
- (c) effective 2;
- (b) minimal/emerging effective 1; and
- (a) not effective 0.

R277-533-7. Minimal or Emerging Effective Category.

If an evaluator rates an educator's performance within the minimal or emerging effective category, the rater shall:

- (1) designate an educator as emerging effective if:
 - (a) the educator:
 - (i) holds a Level 1 educator license; or
 - (ii) is being served by the school district's Entry Years Enhancement (E.Y.E.) program described in Rule R277-522; or
 - (b) the educator:
 - (i) received a new or different teaching or leadership assignment within the last school year; or
 - (ii) is developing in that area; or
- (2) designate an educator as minimally effective if the educator:
 - (a) holds a Level 2 educator license; and
 - (b) is teaching or leading in a familiar assignment.

R277-533-8. Evaluation Reviews.

(1) An educator who is not satisfied with a summative evaluation may request a review in writing of the summative evaluation within 15 calendar days after receiving the written summative evaluation.

(2) A school district shall conduct a review of an educator's summative evaluation:

- (a) as described in this section; and
- (b) the requirements of Section 53A-8a-406.

(3) A review described in Subsection (2) shall be conducted:

- (a) by a certified rater:
 - (i) with experience evaluating educators; and
 - (ii) not employed by the school district; and
- (b) in accordance with the Utah Effective Educator Standards described in Rule R277-530.

(4) A certified rater described in Subsection (3) shall:

- (a) review:
 - (i) the school district's educator evaluation policies and procedures;
 - (ii) the evaluation process conducted for the educator;
 - (iii) the evaluation data from the professional performance, student growth, and stakeholder input components; and
 - (iv) an educator's written response, if submitted as described in Subsection 53A-8a-406(1)(b); and
- (b) report the certified rater's findings, in writing, to the school district's superintendent for action.

(5) The school district shall determine if the initial educator evaluation was issued in accordance with:

- (a) the school district's educator evaluation policies;
- (b) the requirements of the performance standards;
- (c) Title 53A, Chapter 8a, Public Education Human Resource Management Act;
- (d) Rule R277-531; and
- (e) this rule.

R277-533-9. Educator Evaluation Data.

A school district shall report information described in

Section 53A-8a-410 to the Superintendent annually on or before June 30 to be included in the Superintendent's annual report as required by Section 53A-8a-410.

**KEY: educators, evaluations
 August 7, 2017**

**Art X, Sec 3
 53A-1-401**

R277. Education, Administration.**R277-609. Standards for LEA Discipline Plans and Emergency Safety Interventions.****R277-609-1. Authority and Purpose.**

(1) This rule is authorized by:
 (a) Utah Constitution Article X, Section 3, which vests general control and supervision over public education in the Board;

(b) Section 53A-1-401, which allows the Board to make rules to execute the Board's duties and responsibilities under the Utah Constitution and state law;

(c) Subsection 53A-1-402(1)(b), which requires the Board to establish rules concerning discipline and control;

(d) Section 53A-15-603, which requires the Board to adopt rules that require a local school board or governing board of a charter school to enact gang prevention and intervention policies for all schools within the board's jurisdiction;

(e) Section 53A-11-1603, which requires the Board to adopt rules regarding training programs for school principals and school resource officers; and

(f) Section 53A-11-901, which directs local school boards and charter school governing boards to adopt conduct and discipline policies and directs the Board to develop model policies to assist local school boards and charter school governing boards.

(2)(a) The purpose of this rule is to outline requirements for school discipline plans and policies.

(b) An LEA's written policies shall include provisions to develop, implement, and monitor the policies for the use of emergency safety interventions in all schools and for all students within each LEA's jurisdiction.

R277-609-2. Definitions.

(1) "Discipline" includes:

(a) imposed discipline; and

(b) self-discipline.

(2) "Disruptive student behavior" includes:

(a) the grounds for suspension or expulsion described in Section 53A-11-904; and

(b) the conduct described in Subsection 53A-11-908(2)(b).

(3)(a) "Emergency safety intervention" means the use of seclusionary time out or physical restraint when a student presents an immediate danger to self or others.

(b) An "emergency safety intervention" is not for disciplinary purposes.

(4) "Functional Behavior Assessment" or "FBA" means a systematic process of identifying problem behaviors and the events that reliably predict occurrence and non-occurrence of those behaviors and maintain the behaviors across time.

(5) "Immediate danger" means the imminent danger of physical violence or aggression towards self or others, which is likely to cause serious physical harm.

(6) "Imposed discipline" means a code of conduct prescribed for the highest welfare of the individual and of the society in which the individual lives.

(7) "LEA" includes, for purposes of this rule, the Utah Schools for the Deaf and the Blind.

(8) "Physical restraint" means personal restriction that immobilizes or reduces the ability of an individual to move the individual's arms, legs, body, or head freely.

(9) "Plan" means an LEA and school-wide written model for prevention and intervention addressing student behavior management and discipline procedures for students.

(10) "Program" means an instructional or behavioral program, including a program:

(a) provided by contract private providers under the direct supervision of public school staff;

(b) that receives public funding; or

(c) for which the Board has regulatory authority.

(11) "Policy" means standards and procedures that include:

(a) the provisions of Section 53A-11-901 and additional standards, procedures, and training adopted in an open meeting by a local board of education or charter school board that:

(i) defines hazing, bullying, cyber-bullying, and harassment;

(ii) prohibits hazing and bullying;

(iii) requires annual discussion and training designed to prevent hazing, bullying, cyber-bullying, discipline, emergency safety interventions, and harassment among school employees and students; and

(iv) provides for enforcement through employment action or student discipline.

(12) "Qualifying minor" means a school-age minor who:

(a) is at least nine years old; or

(b) turns nine years old at any time during the school year.

(13) "School" means any public elementary or secondary school or charter school.

(14) "School board" means:

(a) a local school board; or

(b) a local charter board.

(15) "School employee" means:

(a) a school teacher;

(b) a school staff member;

(c) a school administrator; or

(d) any other person employed, directly or indirectly, by an LEA.

(16) "Seclusionary time out" means that a student is:

(a) placed in a safe enclosed area by school personnel in accordance with the requirements of Rules R392-200 and R710-4;

(b) purposefully isolated from adults and peers; and

(c) prevented from leaving, or reasonably believes that the student will be prevented from leaving, the enclosed area.

(17) "Section 504 accommodation plan," required by Section 504 of the Rehabilitation Act of 1973, means a plan designed to accommodate an individual who has been determined, as a result of an evaluation, to have a physical or mental impairment that substantially limits one or more major life activities.

(18) "Self-Discipline" means a personal system of organized behavior designed to promote self-interest while contributing to the welfare of others.

R277-609-3. Incorporation of Least Restricted Behavioral Interventions (LRBI) Technical Assistance Manual by Reference.

(1) This rule incorporates by reference the LRBI Technical Assistance Manual, dated September 2015, provides guidance and information in creating successful behavioral systems and supports within Utah's public schools that:

(a) promote positive behaviors while preventing negative or risky behaviors; and

(b) create a safe learning environment that enhances all student outcomes.

(2) A copy of the manual is located at:

(a) <http://www.schools.utah.gov/sars/Behavior.aspx>; and

(b) the Utah State Board of Education.

R277-609-4. LEA Responsibility to Develop Plans.

(1) An LEA or school shall develop and implement a board approved comprehensive LEA plan or policy for student and classroom management, and school discipline.

(2) An LEA shall include administration, instruction and support staff, students, parents, community council, and other community members in policy development, training, and prevention implementation so as to create a community sense of participation, ownership, support, and responsibility.

- (3) A plan described in Subsection (1) shall include:
 - (a) the definitions of Section 53A-11-910;
 - (b) written standards for student behavior expectations, including school and classroom management;
 - (c) effective instructional practices for teaching student expectations, including:
 - (i) self-discipline;
 - (ii) citizenship;
 - (iii) civic skills; and
 - (iv) social skills;
 - (d) systematic methods for reinforcement of expected behaviors;
 - (e) uniform methods for correction of student behavior;
 - (f) uniform methods for at least annual school level data-based evaluations of efficiency and effectiveness;
 - (g) an ongoing staff development program related to development of:
 - (i) student behavior expectations;
 - (ii) effective instructional practices for teaching and reinforcing behavior expectations;
 - (iii) effective intervention strategies; and
 - (iv) effective strategies for evaluation of the efficiency and effectiveness of interventions;
 - (h) procedures for ongoing training of appropriate school personnel in:
 - (i) crisis intervention training;
 - (ii) emergency safety intervention professional development; and
 - (iii) LEA policies related to emergency safety interventions consistent with evidence-based practice;
 - (i) policies and procedures relating to the use and abuse of alcohol and controlled substances by students;
 - (j) policies and procedures, consistent with requirements of Rule R277-613, related to:
 - (i) bullying;
 - (ii) cyber-bullying;
 - (iii) harassment;
 - (iv) hazing; and
 - (v) retaliation;
 - (k) policies and procedures for the use of emergency safety interventions for all students consistent with evidence-based practices including prohibition of:
 - (i) physical restraint, subject to the requirements of Section R277-609-5, except when the physical restraint is allowed as described in Subsection 53A-11-802(2);
 - (ii) prone, or face-down, physical restraint;
 - (iii) supine, or face-up, physical restraint;
 - (iv) physical restraint that obstructs the airway of a student or adversely affects a student's primary mode of communication;
 - (v) mechanical restraint, except:
 - (A) protective or stabilizing restraints;
 - (B) restraints required by law, including seatbelts or any other safety equipment when used to secure students during transportation; and
 - (C) any device used by a law enforcement officer in carrying out law enforcement duties;
 - (vi) chemical restraint, except as:
 - (A) prescribed by a licensed physician, or other qualified health professional acting under the scope of the professional's authority under State law, for the standard treatment of a student's medical or psychiatric condition; and
 - (B) administered as prescribed by the licensed physician or other qualified health professional acting under the scope of the professional's authority under state law;
 - (vii) seclusionary time out, subject to the requirements of Section R277-609-5, except when a student presents an immediate danger of serious physical harm to self or others; and
 - (viii) for a student with a disability, emergency safety interventions written into a student's IEP, as a planned

- intervention, unless:
 - (A) school personnel, the family, and the IEP team agree less restrictive means which meet circumstances described in Section R277-608-5 have been attempted;
 - (B) a FBA has been conducted; and
 - (C) a positive behavior intervention plan based on data analysis has been written into the plan and implemented.
- (l) direction for dealing with bullying and disruptive students;
- (m) direction for schools to determine the range of behaviors and establish the continuum of administrative procedures that may be used by school personnel to address the behavior of habitually disruptive students;
- (n) identification, by position, of an individual designated to issue notices of disruptive and bullying student behavior;
- (o) identification of individuals who shall receive notices of disruptive and bullying student behavior;
- (p) a requirement to provide for documentation of disruptive student behavior prior to referral of disruptive students to juvenile court;
- (q) strategies to provide for necessary adult supervision;
- (r) a requirement that policies be clearly written and consistently enforced;
- (s) notice to employees that violation of this rule may result in employee discipline or action;
- (t) gang prevention and intervention policies in accordance with Subsection 53A-15-603(1); and
- (u) provisions that account for an individual LEA's or school's unique needs or circumstances, including:
 - (i) the role of law enforcement; and
 - (ii) emergency medical services; and
 - (iii) a provision for publication of notice to parents and school employees of policies by reasonable means.
- (4) A plan described in Subsection (1) may include:
 - (a) the provisions of Subsection 53A-15-603(2); and
 - (b) a plan for training administrators and school resource officers in accordance with Section 53A-11-1603.

R277-609-5. Physical Restraint and Seclusionary Time Out.

- (1) When used consistently with an LEA plan under Subsection R277-609-4(1);
 - (a) a physical restraint must be immediately terminated when:
 - (i) a student is no longer an immediate danger to self or others; or
 - (ii) a student is in severe distress; and
 - (b) the use of physical restraint shall be for the minimum time necessary to ensure safety and a release criteria, as outlined in LEA policies, must be implemented.
- (2) If a public education employee physically restrains a student, the school or the public education employee shall immediately notify:
 - (a) the student's parent or guardian; and
 - (b) school administration.
- (3) A public education employee may not use physical restraint on a student for more than 30 minutes.
- (4) In addition to the notice described in Subsection (2), if a public education employee physically restrains a student for more than fifteen minutes, the school or the public education employee shall immediately notify:
 - (a) the student's parent or guardian; and
 - (b) school administration.
- (5) An LEA may not use physical restraint as a means of discipline or punishment.
- (6) If a public education employee uses seclusionary time out, the public education employee shall:
 - (a) use the minimum time necessary to ensure safety;
 - (b) use release criteria as outlined in LEA policies;
 - (c) ensure that any door remains unlocked;

(d) maintain the student within line of sight of the public education employee;

(e) use the seclusionary time out consistent with the LEA's plan described in Section R277-609-4; and

(f) ensure that the enclosed area meets the fire and public safety requirements described in R392-200 and R710-4.

(7) If a student is placed in seclusionary time out, the school or the public education employee shall immediately notify:

- (a) the student's parent or guardian; and
- (b) school administration.

(8) A public education employee may not place a student in a seclusionary time out for more than 30 minutes.

(9) In addition to the notice described in Subsection (7), if a public education employee places a student in seclusionary time out for more than fifteen minutes, the school or the public education employee shall immediately notify:

- (a) the student's parent or guardian; and
- (b) school administration.

(10) Seclusionary time out may only be used for maintaining safety.

(11) A public education employee may not use seclusionary time out as a means of discipline or punishment.

R277-609-6. Implementation.

(1) An LEA shall implement strategies and policies consistent with the LEA's plan required in Section R277-609-4.

(2) An LEA shall develop, use and monitor a continuum of intervention strategies to assist students, including students whose behavior in school falls repeatedly short of reasonable expectations, by teaching student behavior expectations, reinforcing student behavior expectations, re-teaching behavior expectations, followed by effective, evidence-based interventions matched to student needs prior to administrative referral.

(3) An LEA shall implement positive behavior interventions and supports as part of the LEA's continuum of behavior interventions strategies.

(4)(a) An LEA shall provide a formal written assessment of a habitually disruptive student as part of a student's suspension or expulsion process that results in court involvement, once an LEA receives information from the court that disruptive student behavior will result in court action.

(b) An LEA shall use assessment information to connect parents and students with supportive school and community resources.

(5) Nothing in state law or this rule restricts an LEA from implementing policies to allow for suspension of students of any age consistent with due process requirements and consistent with all requirements of the Individuals with Disabilities Education Act 2004.

(6) An LEA shall establish an Emergency Safety Intervention (ESI) Committee before September 1, 2015.

(7) The LEA ESI Committee:

- (a) shall include:
 - (i) at least two administrators;
 - (ii) at least one parent or guardian of a student enrolled in the LEA, appointed by the LEA; and
 - (iii) at least two certified educational professionals with behavior training and knowledge in both state rules and LEA discipline policies;

(b) shall meet often enough to monitor the use of emergency safety intervention in the LEA;

(c) shall determine and recommend professional development needs; and

(d) shall develop policies for local dispute resolution processes to address concerns regarding disciplinary actions.

(8) An LEA shall have procedures for the collection, maintenance, and periodic review of documentation or records

of the use of emergency safety interventions at schools within the LEA.

(9) The Superintendent shall define the procedures for the collection, maintenance, and review of records described in Subsection (8).

(10) An LEA shall provide documentation of any school, program or LEA's use of emergency safety interventions to the Superintendent annually.

R277-609-7. Special Education Exception(s) to this Rule.

(1) An LEA shall have in place, as part of its LEA special education policies, procedures, or practices, criteria and steps for using emergency safety interventions consistent with state and federal law.

(2) The Superintendent shall periodically review:

(a) all LEA special education behavior intervention plans, procedures, or manuals; and

(b) emergency safety intervention data as related to IDEA eligible students in accordance with Utah's Program Improvement and Planning System.

R277-609-8. Parent/Guardian Notification and Court Referral.

(1) Through school administrative and juvenile court referral consequences, LEA policies shall provide procedures for qualifying minors and their parents to participate in decisions regarding consequences for disruptive student behavior.

(2) An LEA shall establish policies that:

(a) provide notice to parents and information about resources available to assist a parent in resolving the parent's school-age minors' disruptive behavior;

(b) provide for notices of disruptive behavior to be issued by schools to qualifying minors and parents consistent with:

(i) numbers of disruptions and timelines in accordance with Section 53A-11-910;

(ii) school resources available;

(iii) cooperation from the appropriate juvenile court in accessing student school records, including:

(A) attendance;

(B) grades;

(C) behavioral reports; and

(D) other available student school data; and

(iv) provide due process procedures for minors and parents to contest allegations and citations of disruptive student behavior.

(3)(a) When a crisis situation occurs that requires the use of an emergency safety intervention to protect the student or others from harm, a school shall notify the LEA and the student's parent or guardian as soon as possible and no later than the end of the school day.

(b) In addition to the notice described in Subsection (3)(a), if a crisis situation occurs for more than fifteen minutes, the school shall immediately notify:

(i) the student's parent or guardian; and

(ii) school administration.

(d) A notice described in Subsection (3)(a) shall be documented within student information systems (SIS) records.

(4)(a) A school shall provide a parent or guardian with a copy of any notes or additional documentation taken during a crisis situation upon request of the parent or guardian.

(b) Within 24 hours of a crisis situation, a school shall notify a parent or guardian that the parent or guardian may request a copy of any notes or additional documentation taken during a crisis situation.

(c) A parent or guardian may request a time to meet with school staff and administration to discuss a crisis situation.

R277-609-9. Model Policies.

(1) The Superintendent shall develop, review regularly, and provide to LEA boards model policies to address disruptive student behavior and appropriate consequences.

(2) The Superintendent shall provide technical assistance to LEAs in developing and implementing policies and training employees in the appropriate use of physical force and emergency safety interventions to the extent of resources available.

R277-609-10. LEA Compliance.

If an LEA fails to comply with this rule, the Superintendent may withhold funds in accordance with Rule R277-114 or impose any other sanction authorized by law.

KEY: disciplinary actions, disruptive students, emergency safety interventions

August 7, 2017

Notice of Continuation October 14, 2016

Art X Sec 3

53A-1-401

53A-1-402(1)

53A-15-603

53A-11-901

53A-11-1603

R277. Education, Administration.**R277-700. The Elementary and Secondary School General Core.****R277-700-1. Authority and Purpose.**

(1) This rule is authorized by:

(a) Article X, Section 3, of the Utah Constitution, which places general control and supervision of the public schools under the Board;

(b) Subsection 53A-1-402(1), which directs the Board to make rules regarding competency levels, graduation requirements, curriculum, and instruction requirements;

(c) Section 53A-1-402.6, which directs the Board to establish Core Standards in consultation with LEA boards and superintendents and directs LEA boards to adopt local curriculum and to design programs to help students master the General Core;

(d) Title 53A, Chapter 1, Part 12, Career and College Readiness Mathematics Competency, which directs the Board to establish college and career mathematics competency standards;

(e) Section 53A-13-109.5, which requires the Board to provide rules related to a basic civics test; and

(f) Section 53A-1-401, which allows the Board to make rules to execute the Board's duties and responsibilities under the Utah Constitution and state law.

(2) The purpose of this rule is to specify the minimum Core Standards and General Core requirements for the public schools, and to establish responsibility for mastery of Core Standard requirements.

R277-700-2. Definitions.

For purposes of this rule:

(1)(a) "Applied course" means a public school course or class that applies the concepts of a Core subject.

(b) "Applied course" includes a course offered through Career and Technical Education or through other areas of the curriculum.

(2) "Assessment" means a summative computer adaptive assessment for:

(a) English language arts grades 3 through 11;

(b) mathematics grades 3 through 8, and Secondary I, II, and III; or

(c) science grades 4 through 8, earth science, biology, physics and chemistry.

(3) "Career and Technical Education (CTE)" means an organized educational program or course which directly or indirectly prepares students for employment, or for additional preparation leading to employment, in an occupation, where entry requirements generally do not require a baccalaureate or advanced degree.

(4) "Core Standard" means a statement of what a student enrolled in a public school is expected to know and be able to do at a specific grade level or following completion of an identified course.

(5) "Core subject" means a course for which there is a declared set of Core Standards as approved by the Board.

(6) "Elementary school" for purposes of this rule means a school that serves grades K-6 in whatever kind of school the grade levels exist.

(7) "General Core" means the courses, content, instructional elements, materials, resources and pedagogy that are used to teach the Core Standards, including the ideas, knowledge, practice and skills that support the Core Standards.

(8) "High school" for purposes of this rule means a school that serves grades 9-12 in whatever kind of school the grade levels exist.

(9) "LEA" or "local education agency" includes the Utah Schools for the Deaf and the Blind.

(10) "Life Skills document" means a companion document

to the Core Standards that describes the knowledge, skills, and dispositions essential for all students; the life skills training helps students transfer academic learning into a comprehensive education.

(11) "Middle school" for purposes of this rule means a school that serves grades 7-8 in whatever kind of school the grade levels exist.

(12) "Summative adaptive assessment" means an assessment that:

(a) is administered upon completion of instruction to assess a student's achievement;

(b) is administered online under the direct supervision of a licensed educator;

(c) is designed to identify student achievement on the Core Standards for the respective grade and course; and

(d) measures the full range of student ability by adapting to each student's responses, selecting more difficult questions when a student answers correctly and less difficult questions when a student answers incorrectly.

R277-700-3. General Core and Core Standards.

(1) The Board establishes minimum course description standards for each course in the required General Core.

(2)(a) The Superintendent shall develop, in cooperation with LEAs, course descriptions for required and elective courses.

(b) The Superintendent shall provide parents and the general public an opportunity to participate in the development process of the course descriptions described in Subsection (2)(a).

(3)(a) The Superintendent shall ensure that the courses described in Subsection (2):

(i) contain mastery criteria for the courses; and

(ii) stress mastery of the course material, Core Standards, and life skills consistent with the General Core and Life Skills document.

(b) The Superintendent shall place a greater emphasis on a student's mastery of course material rather than completion of predetermined time allotments for courses.

(4) An LEA board shall administer the General Core and comply with student assessment procedures consistent with state law.

R277-700-4. Elementary Education Requirements.

(1) The Core Standards and a General Core for elementary school students in grades K-6 are described in this section.

(2) The following are the Elementary School Education Core Subject Requirements:

(a) English Language Arts;

(b) Mathematics;

(c) Science;

(d) Social Studies;

(e) Arts:

(i) Visual Arts;

(ii) Music;

(iii) Dance; or

(iv) Theatre;

(f) Health Education;

(g) Physical Education;

(h) Educational Technology; and

(i) Library Media.

(3) An LEA board shall provide access to the General Core to all students within the LEA.

(4) An LEA board is responsible for student mastery of the Core Standards.

(5) An LEA shall conduct informal assessments on a regular basis to ensure continual student progress.

(6) An LEA shall use Board-approved summative adaptive assessments to assess student mastery of the following:

- (a) reading;
- (b) language arts;
- (c) mathematics;
- (d) science; and
- (e) effectiveness of written expression in grades five and eight.

(7) An LEA shall provide remediation to elementary students who do not achieve mastery of the subjects described in this section.

R277-700-5. Middle School Education Requirements.

(1) The Core Standards and a General Core for middle school students are described in this section.

(2) A student in grades 7-8 is required to earn a minimum of 12 units of credit to be properly prepared for instruction in grades 9-12.

(3) In addition to the Board requirements described in this section, an LEA board may require a student to complete additional units of credit.

(4) The following are the Grades 7-8 General Core Requirements and units of credit:

- (a) Language Arts (2.0 units of credit);
- (b) Mathematics (2.0 units of credit);
- (c) Science (2.0 units of credit);
- (d) Social Studies (1.5 units of credit);
- (e) The Arts (1.0 units of credit from the following):
 - (i) Visual Arts;
 - (ii) Music;
 - (iii) Dance; or
 - (iv) Theatre.
- (f) Physical Education (1.0 units of credit);
- (g) Health Education (0.5 units of credit);
- (h) College and Career Awareness (1.0 units of credit); and
- (i) beginning no later than the 2018-2019 school year, Digital Literacy (0.5 units of credit).

(5) An LEA shall use evidence-based best practices, technology, and other instructional media in middle school curricula to increase the relevance and quality of instruction.

(6) An LEA shall use Board-approved summative adaptive assessments to assess student mastery of the following:

- (a) reading;
- (b) language arts;
- (c) mathematics; and
- (d) science in grades 7 and 8.

R277-700-6. High School Requirements.

(1) The General Core and Core Standards for students in grades 9-12 are described in this section.

(2) A student in grades 9-12 is required to earn a minimum of 24 units of credit through course completion or through competency assessment consistent with R277-705 to graduate.

(3) The General Core credit requirements from courses approved by the Board are described in Subsections (4) through (18).

(4) Language Arts (4.0 units of credit from the following):

- (a) Grade 9 level (1.0 unit of credit);
- (b) Grade 10 level (1.0 unit of credit);
- (c) Grade 11 level (1.0 unit of credit); and
- (d) Grade 12 level (1.0 Unit of credit) consisting of applied or advanced language arts credit from the list of Board-approved courses using the following criteria and consistent with the student's SEOP/Plan for College and Career Readiness:
 - (i) courses are within the field/discipline of language arts with a significant portion of instruction aligned to language arts content, principles, knowledge, and skills;
 - (ii) courses provide instruction that leads to student understanding of the nature and disposition of language arts;
 - (iii) courses apply the fundamental concepts and skills of language arts;

(iv) courses provide developmentally appropriate content; and

(v) courses develop skills in reading, writing, listening, speaking, and presentation.

(5) Mathematics (3.0 units of credit) shall be met minimally through successful completion of a combination of the foundation or foundation honors courses, Secondary Mathematics I, Secondary Mathematics II, and Secondary Mathematics III.

(6)(a) A student may opt out of Secondary Mathematics III if the student's parent submits a written request to the school.

(b) If a student's parent requests an opt out described in Subsection (6)(a), the student is required to complete a third math credit from the Board-approved mathematics list.

(7) A 7th or 8th grade student may earn credit for a mathematics foundation course before 9th grade, consistent with the student's SEOP/Plan for College and Career Readiness if:

(a) the student is identified as gifted in mathematics on at least two different USOE-approved assessments;

(b) the student is dual enrolled at the middle school/junior high school and the high school;

(c) the student qualifies for promotion one or two grade levels above the student's age group and is placed in 9th grade; or

(d) the student takes the USOE competency test in the summer prior to 9th grade and earns high school graduation credit for the course.

(8) A student who successfully completes a mathematics foundation course before 9th grade is required to earn 3.0 units of additional mathematics credit by:

(a) taking the other mathematics foundation courses described in Subsection (5); and

(b) an additional course from the Board-approved mathematics list consistent with:

(i) the student's SEOP/Plan for College and Career Readiness; and

(ii) the following criteria:

(A) courses are within the field/discipline of mathematics with a significant portion of instruction aligned to mathematics content, principles, knowledge, and skills;

(B) courses provide instruction that lead to student understanding of the nature and disposition of mathematics;

(C) courses apply the fundamental concepts and skills of mathematics;

(D) courses provide developmentally appropriate content; and

(E) courses include the five process skills of mathematics: problem solving, reasoning, communication, connections, and representation.

(9) A student who successfully completes a Calculus course with a "C" grade or higher has completed mathematics graduation requirements, regardless of the number of mathematics credits earned.

(10) Science (3.0 units of credit):

(a) shall be met minimally through successful completion of 2.0 units of credit from two of the following five science foundation areas:

(i) Earth Science (1.0 units of credit);

(A) Earth Science;

(B) Advanced Placement Environmental Science; or

(C) International Baccalaureate Environmental Systems;

(ii) Biological Science (1.0 units of credit);

(A) Biology;

(B) Human Biology;

(C) Biology: Agricultural Science and Technology;

(D) Advanced Placement Biology;

(E) International Baccalaureate Biology; or

(F) Biology with Lab Concurrent Enrollment;

(iii) Chemistry (1.0 units of credit);

- (A) Chemistry;
 - (B) Advanced Placement Chemistry;
 - (C) International Baccalaureate Chemistry; or
 - (D) Chemistry with Lab Concurrent Enrollment;
 - (iv) Physics (1.0 units of credit);
 - (A) Physics;
 - (B) Physics with Technology;
 - (C) Advanced Placement Physics (1, 2, C: Electricity and Magnetism, or C: Mechanics);
 - (D) International Baccalaureate Physics; or
 - (E) Physics with Lab Concurrent Enrollment; or
 - (v) Computer Science (1.0 units of credit):
 - (A) Advanced Placement Computer Science;
 - (B) Computer Science Principles; or
 - (C) Computer Programming II; and
 - (b) one additional unit of credit from:
 - (i) the foundation courses described in Subsection(10)(a);
- or
- (ii) the applied or advanced science list:
 - (A) determined by the LEA board; and
 - (B) approved by the Board using the following criteria and consistent with the student's SEOP/Plan for College and Career Readiness:
 - (I) courses are within the field/discipline of science with a significant portion of instruction aligned to science content, principles, knowledge, and skills;
 - (II) courses provide instruction that leads to student understanding of the nature and disposition of science;
 - (III) courses apply the fundamental concepts and skills of science;
 - (IV) courses provide developmentally appropriate content;
 - (V) courses include the areas of physical, natural, or applied sciences; and
 - (VI) courses develop students' skills in scientific inquiry.
 - (11) Social Studies (3.0 units of credit) shall be met minimally through successful completion of:
 - (a) 2.5 units of credit from the following courses:
 - (i) Geography for Life (0.5 units of credit);
 - (ii) World Civilizations (0.5 units of credit);
 - (iii) U.S. History (1.0 units of credit); and
 - (iv) U.S. Government and Citizenship (0.5 units of credit);
 - (b) Social Studies (0.5 units of credit per LEA discretion);
- and
- (c) a basic civics test or alternate assessment described in R277-700-8.
 - (12) The Arts (1.5 units of credit from any of the following performance areas):
 - (a) Visual Arts;
 - (b) Music;
 - (c) Dance; or
 - (d) Theatre.
 - (13) Physical and Health Education (2.0 units of credit from any of the following):
 - (a) Health (0.5 units of credit);
 - (b) Participation Skills (0.5 units of credit);
 - (c) Fitness for Life (0.5 units of credit);
 - (d) Individualized Lifetime Activities (0.5 units of credit);
- or
- (e) team sport/athletic participation (maximum of 0.5 units of credit with school approval).
 - (14) Career and Technical Education (1.0 units of credit from any of the following):
 - (a) Agriculture;
 - (b) Business;
 - (c) Family and Consumer Sciences;
 - (d) Health Science and Technology;
 - (e) Information Technology;
 - (f) Marketing;
 - (g) Technology and Engineering Education; or

- (h) Trade and Technical Education.
- (15) Digital Studies (0.5 units of credit)
- (16) Library Media Skills (integrated into the subject areas).
- (17) General Financial Literacy (0.5 units of credit).
- (18) Electives (5.5 units of credit).
- (19) An LEA shall use Board-approved summative adaptive assessments to assess student mastery of the following subjects:
 - (a) reading;
 - (b) language arts through grade 11;
 - (c) mathematics as defined in Subsection (5); and
 - (d) science as defined in Subsection (10).
- (20) An LEA board may require a student to earn credits for graduation that exceed the minimum Board requirements described in this rule.
- (21) An LEA board may establish and offer additional elective course offerings at the discretion of the LEA board.
- (22)(a) An LEA may modify a student's graduation requirements to meet the unique educational needs of a student if:
 - (i) the student has a disability; and
 - (ii) the modifications to the student's graduation requirements are made through the student's individual IEP.
- (b) An LEA shall document the nature and extent of a modification, substitution, or exemption made to a student's graduation requirements described in Subsection (22)(a) in the student's IEP.
- (23) The Board and Superintendent may review an LEA board's list of approved courses for compliance with this rule.
- (24) An LEA may modify graduation requirements for an individual student to achieve an appropriate route to student success if the modification:
 - (a) is consistent with:
 - (i) the student's IEP; or
 - (ii) SEOP/Plan for College and Career Readiness;
 - (b) is maintained in the student's file;
 - (c) includes the parent's signature; and
 - (d) maintains the integrity and rigor expected for high school graduation, as determined by the Board.

R277-700-7. Student Mastery and Assessment of Core Standards.

- (1) An LEA shall ensure students master the Core Standards at all levels.
- (2) An LEA shall provide remediation for secondary students who do not achieve mastery under Section 53A-13-104.
- (3) An LEA shall provide remedial assistance to students who are found to be deficient in basic skills through a statewide assessment in accordance with the provisions of Subsection 53A-1-606(1).
- (4) If a parent objects to a portion of a course or to a course in its entirety under provisions of Section 53A-13-101.2 and R277-105, the parent shall be responsible for the student's mastery of Core Standards to the satisfaction of the school prior to the student's promotion to the next course or grade level.
- (5)(a) A student with a disability served by a special education program is required to demonstrate mastery of the Core Standards.
 - (b) If a student's disability precludes the student from successfully mastering the Core Standards, the student's IEP team, on a case-by-case basis, may provide the student an accommodation for, or modify the mastery demonstration to accommodate, the student's disability.
- (6) A student may demonstrate competency to satisfy course requirements consistent with R277-705-3.
- (7) LEAs are ultimately responsible for and shall comply with all assessment procedures, policies and ethics as described

in R277-404.

R277-700-8. Civics Education Initiative.

- (1) For purposes of this section:
- (a) "Student" means:
- (i) a public school student who graduates on or after January 1, 2016; or
- (ii) a student enrolled in an adult education program who receives an adult education secondary diploma on or after January 1, 2016.
- (b) "Basic civics test" means the same as that term is defined in Section 53A-13-109.5.
- (2) Except as provided in Subsection (3), an LEA shall:
- (a) administer a basic civics test in accordance with the requirements of Section 53A-13-109.5; and
- (b) require a student to pass the basic civics test as a condition of receiving:
- (i) a high school diploma; or
- (ii) an adult education secondary diploma.
- (3) An LEA may require a student to pass an alternate assessment if:
- (a)(i) the student has a disability; and
- (ii) the alternate assessment is consistent with the student's IEP; or
- (b) the student is within six months of intended graduation.
- (4) Except as provided in Subsection (5), the alternate assessment shall be given:
- (a) in the same manner as an exam given to an unnaturalized citizen; and
- (b) in accordance with 8 C.F.R. Sec. 312.2.
- (5) An LEA may modify the manner of the administration of an alternate assessment for a student with a disability in accordance with the student's IEP.
- (6) If a student passes a basic civics test or an alternate assessment described in this section, an LEA shall report to the Superintendent that the student passed the basic civics test or alternate assessment.
- (7) If a student who passes a basic civics test or an alternate assessment transfers to another LEA, the LEA may not require the student to re-take the basic civics test or alternate assessment.

R277-700-9. College and Career Readiness Mathematics Competency.

- (1) For purposes of this section, "senior student with a special circumstance" means a student who:
- (a) is pursuing a college degree after graduation; and
- (b) has not met one of criteria described in Subsection (2)(a) before the beginning of the student's senior year of high school.
- (2) Except as provided in Subsection (4), in addition to the graduation requirements described in R277-700-6, beginning with the 2016-17 school year, a student pursuing a college degree after graduation shall:
- (a) receive one of the following:
- (i) a score of 3 or higher on an Advanced Placement (AP) calculus AB or BC exam;
- (ii) a score of 3 or higher on an Advanced Placement (AP) statistics exam;
- (iii) a score of 5 or higher on an International Baccalaureate (IB) higher level math exam;
- (iv) a score of 50 or higher on a College Level Exam Program (CLEP) pre-calculus or calculus exam;
- (v) a score of 26 or higher on the mathematics portion of the American College Test (ACT) exam;
- (vi) a score of 640 or higher on the mathematics portion of the Scholastic Aptitude Test (SAT) exam; or
- (vii) a "C" grade in a concurrent enrollment mathematics

course that satisfies a state system of higher education quantitative literacy requirement; or

(b) if the student is a senior student with a special circumstance, take a full year mathematics course during the student's senior year of high school.

(3) Except as provided in Subsection (4), in addition to the graduation requirements described in R277-700-6, beginning with the 2016-17 school year, a non-college and degree-seeking student shall complete appropriate math competencies for the student's career goals as described in the student's SEOP/Plan for College and Career Readiness.

(4) An LEA may modify a student's college or career readiness mathematics competency requirement under this section if:

- (a) the student has a disability; and
- (b) the modification to the student's college or career readiness mathematics competency requirement is made through the student's IEP.

(5)(a) Beginning with the 2016-17 cohort, an LEA shall report annually to the LEA's governing board the number of students within the LEA who:

- (i) meet the criteria described in Subsection (2)(a);
- (ii) take a full year of mathematics as described in Subsection (2)(b);
- (iii) meet appropriate math competencies as established in the students' career goals as described in Subsection (3); and
- (iv) meet the college or career readiness mathematics competency requirement established in the students' IEP as described in Subsection (4).

(b) An LEA shall provide the information described in Subsection (5)(a) to the Superintendent by October 1 of each year.

**KEY: graduation requirements, standards
June 21, 2016**

Notice of Continuation August 14, 2017 **Art X Sec 3
53A-1-402(1)(b)
53A-1-402.6
53A-1-401**

R277. Education, Administration.**R277-703. Centennial Scholarship for Early Graduation.****R277-703-1. Definitions.**

- A. "ATC" means Applied Technology Center.
- B. "Board" means the Utah State Board of Education.
- C. "Centennial Scholarship" means the amount awarded to an early graduating student designated in Section 53A-15-102.
- D. "LEA" means a local education agency, including local school boards/public school districts, charter schools, and, for purposes of this rule, the Utah Schools for the Deaf and the Blind.
- E. "SEOP" means student education/occupational plan.

R277-703-2. Authority and Purpose.

A. This rule is authorized by Utah Constitution Article X, Section 3 which places general control and supervision of the public school system under the Board, Section 53A-1-402(1) which authorizes the Board to make rules regarding competency levels, graduation requirements, curriculum, and instruction requirements and Section 53A-1-401(3) which authorizes the Board to adopt rules in accordance with its responsibilities.

B. This rule designates the Early Graduation Centennial Scholarship Certificate for use by public schools, allows for graduation to be flexible and appropriate to meet individual students' needs, and outlines the early graduation procedure. If a student graduates any time following the eleventh grade year and enters a Utah post-secondary institution, the LEA shall receive a reimbursement designated for the public high school from which the student graduated early. The post-secondary institution shall receive an Early Graduation Centennial Scholarship Certificate signed by the high school principal/director entitling the early graduate to a partial tuition scholarship following the date of graduation according to the schedule established by this rule.

R277-703-3. Curriculum Options for Accelerating a Secondary School Student's Education Program.

A. A student shall complete the courses of study and credit mandated by the Board and by the local board of education/local charter board.

B. Options for earning additional credit may include but are not limited to:

- (1) Courses:
 - (a) High school summer school;
 - (b) High school or ATC early morning or after school classes;
 - (c) Courses completed at the student's own rate based on performance (the local board of education/local charter board is responsible for assessment of mastery, R277-700-6);
 - (d) College courses numbered 101 and above from fully accredited institutions (concurrent enrollment, extension division, or continuing education classes);
 - (e) LEA approved high school or college level correspondence courses;
 - (f) Equivalency ratio of higher education hours to high school credits: five (5) quarter or three (3) semester hours equal one (1) unit of high school credit.
- (2) Demonstrated proficiency by assessment (amount of credit to be determined by the local board of education/local charter board, R277-700-6):
 - (a) Advanced Placement Examination as approved by the local board of education/local charter board;
 - (b) ACT or SAT scores that meet or exceed a level set by the local board of education/local charter board;
 - (c) Utah state or LEA secondary end-of-course tests;
 - (d) Demonstrated proficiency in a subject, as assessed by the local board of education/local charter board;
 - (e) College Level Examination Program (CLEP) tests.
- (3) Approved work experience, as assessed by the local

board of education/local charter board.

(4) Demonstrated mastery in an experimental program that has received prior approval from the Board (local board of education/local charter board seeks approval from the Board);

(5) Increased credit for courses that are combined into a time frame that ordinarily accommodates a lesser number of classes, as approved by the local board of education/local charter board;

(6) Independent study: a student may be allowed credit for an independent research project or independent reading relevant to a course of study;

(7) Credit for experience gained during travel relevant to a specific course. Prior approval shall be obtained from and credit awarded by the local board of education/local charter board.

R277-703-4. Early Graduation Student Education Plan.

A. In consultation with the student's parent or guardian and school advisor, each student shall indicate to the secondary principal/director the intent to complete early graduation at the beginning of the ninth grade year or as soon thereafter as the intent is known.

B. To be eligible for early graduation, a student shall have a current SEOP on file at the student's high school under provisions of R277-700-8.

R277-703-5. Local Education Requirements.

A. Requirements relating to semesters in membership are inapplicable to students who have been approved under Section R277-703-4 for graduation following the eleventh grade year.

B. Local academic and citizenship credit requirements for graduation which exceed Board requirements shall include provisions that permit students to graduate early.

R277-703-6. Funding Provisions.

A. An LEA shall receive a payment designated for each high school from which students graduated before the end of the twelfth grade year.

B. Payment provisions:

(1) LEAs shall receive payment for one-half of the designated Centennial Scholarship amount for each student reported as having graduated at the conclusion of the eleventh grade year on the S-3 report in the fiscal year following the student's graduation.

(2) LEAs shall receive payment based on a percentage of the Centennial Scholarship amount for each student reported as graduating during the twelfth grade year. These students shall also be listed on the S-3 report and payment shall be made to the LEA in the fiscal year following the students' graduation. LEAs shall receive payment for schools operating on the quarter or trimester system for each early graduating student according to the following schedule:

- (a) End of first quarter of 12th grade year: 75 percent of one-half of the Centennial Scholarship amount;
- (b) End of second quarter of 12th grade year: 50 percent of one-half of the Centennial Scholarship amount;
- (c) End of third quarter of 12th grade year: 25 percent of one-half of the Centennial Scholarship amount;
- (d) End of first trimester of 12th grade year: 67 percent of one-half of the Centennial Scholarship amount;
- (e) End of second trimester of 12th grade year: 33 percent of one-half of the Centennial Scholarship amount.

C. A student who graduates from high school at the conclusion of the eleventh grade year or during the twelfth grade year shall be entitled to a partial tuition scholarship in the form of the Early Graduation Centennial Scholarship Certificate to be used at a Utah public college, university, community college, applied technology center, or any other institution in Utah accredited by the Northwest Accreditation Commission

that offers post-secondary courses. The post-secondary institution shall complete the Early Graduation Centennial Scholarship Certificate and submit it to the Utah State Office of Education. Upon receipt of the Early Graduation Centennial Scholarship Certificate, the Utah State Office of Education shall verify the information, and reimburse the institution an amount set forth in the following schedule in the fiscal year during which the student enrolls in a post-secondary institution. To be eligible for the scholarship, the student must enroll in an eligible post-secondary institution within one calendar year of graduation.

(1) The student who graduates at the end of the eleventh grade year shall receive a full Centennial Scholarship.

(2) The student who graduates at the end of the first quarter of the twelfth grade year shall receive 75 percent of the Centennial Scholarship amount.

(3) The student who graduates at the end of the second quarter of the twelfth grade year shall receive 50 percent of the Centennial Scholarship amount.

(4) The student who graduates at the end of the third quarter of the twelfth grade year shall receive 25 percent of the Centennial Scholarship amount.

(5) The student who graduates at the end of the first trimester of the twelfth grade year shall receive 67 percent of the Centennial Scholarship amount.

(6) The student who graduates at the end of the second trimester of the twelfth grade year shall receive 33 percent of the Centennial Scholarship amount.

KEY: graduation requirements, curricula

October 9, 2012

Notice of Continuation August 14, 2017

Art X Sec 3

53A-1-402(1)

53A-1-401(3)

R277. Education, Administration.**R277-733. Adult Education Programs.****R277-733-1. Authority and Purpose.**

- (1) This rule is authorized by:
 - (a) Utah Constitution Article X, Section 3 which vests general control and supervision over public education in the Board;
 - (b) Section 53A-15-401 which vests general control and supervision over adult education in the Board;
 - (c) Subsection 53A-1-402(1), which allows the Board to adopt minimum standards for programs;
 - (d) Section 53A-1-401, which allows the Board to make rules to execute the Board's duties and responsibilities under the Utah Constitution and state law; and
 - (e) Section 53A-1-403.5, which vests the Board with responsibility to provide education to persons in the custody of Utah Department of Corrections.
- (2) The purpose of this rule is to describe curriculum, program standards, allocation formulas, and operation procedures for the adult education program for adult education students both in and out of state custody.

R277-733-2. Incorporation of Utah Adult Education Policies and Procedures Guide by Reference.

- (1) The rule incorporates by reference the Utah Adult Education Policies and Procedures Guide, June 2016 Revision, which provides day-to-day operating standards and technical assistance to eligible providers for operation of adult education programs.
- (2) A copy of the guide is located at:
 - (a) <http://www.schools.utah.gov/adulted/Directors---Coordinators/Policies-and-Procedures-and-Reports.aspx>; and
 - (b) the Utah State Board of Education.

R277-733-3. Definitions.

- (1) "Adult" means an individual 18 years of age or over.
- (2) "Adult education" means organized educational programs below the collegiate/postsecondary level, other than regular full-time K-12 secondary education programs:
 - (a) provided by LEAs or other eligible providers;
 - (b) affording opportunities for individuals having demonstrated both presence and intent to reside within the state of Utah;
 - (c) provided for out-of-school youth (16 years of age and older) or adults who have or have not graduated from high school; and
 - (d) provided to improve literacy levels and to further high school level education.
- (3)(a) "Adult Basic Education" or "ABE" means a program of instruction at or below the 8.9 academic grade level, which prepares adults for advanced education and training, who lack competency in reading, writing, speaking, problem solving or computation at a level that substantially impairs their ability to find or retain adequate employment that will allow them to become employable, contributing members of society.
 - (b) ABE is designed to help adults by:
 - (i) increasing their independence;
 - (ii) improving their ability to benefit from occupational training;
 - (iii) increasing opportunities for more productive and profitable employment; and
 - (iv) making them better able to meet adult responsibilities.
- (4) "Adult Education and Family Literacy Act" or "AEFLA" means Title II of the Workforce Innovation Opportunity Act of 2014, which provides the principle source of federal support for:
 - (a) academic instruction and education services below the post-secondary level that increase an adult education student's ability to read, write and speak in English, and perform

mathematics or other activities necessary for the attainment of a secondary diploma or its recognized equivalent; and

- (b) transition to post-secondary education, training, and employment.

(5) "Adult High School Completion" or "AHSC" means a program of academic instruction at the 9.0 grade level or above in Board-approved subjects for eligible adult education students who are seeking an Adult Education Secondary Diploma from an adult education program.

(6) "College and Career Readiness Plan" or "CCRP" means a plan developed by a student in consultation with adult education program counselors, teachers, and administrators that:

- (a) is initiated at the time of entrance into an adult education program;
- (b) identifies a student's skills and objectives;
- (c) identifies a career pathway strategy to guide a student's course selection; and
- (d) links a student to post-secondary education, training, or employment using a program-defined adult education transition process.

(7) "Desk monitoring" means the monthly review of UTopia data to ensure program integrity.

(8)(a) "Eligible adult education student" means an individual who provides documentation that his primary and permanent residency is in Utah, and:

- (i) is 17 years of age or older, and whose high school class has graduated;
 - (ii) is under 18 years of age and is married;
 - (iii) has been emancipated or adjudicated as an adult; or
 - (iv) is an out-of-school youth 16 years of age or older who has not graduated from high school and who:
 - (A) is basic skills deficient;
 - (B) does not have a secondary school diploma, its recognized equivalent, or an equivalent level of education; or
 - (C) is an ELL.

(b) A non-resident may be treated as an eligible adult education student in accordance with an individual agreement between an eligible provider and another state.

(9) "Eligible Provider" may include:

- (a) an LEA;
- (b) a community-based or faith-based organization;
- (c) a voluntary literacy organization;
- (d) an institution of higher education;
- (e) a public or private non-profit agency;
- (f) a library;
- (g) a public housing authority;
- (h) a non-profit institution not described in Subsections (a) through (g) that has the ability to provide adult education and literacy activities to eligible adult education students.

(i) a consortium or coalition of providers identified in Subsections (a) through (h); or

(j) a partnership between an employer and a provider identified in Subsections (a) through (i).

(10)(a) "Enrollee" means an adult student who has:

- (i) 12 or more contact hours in an adult education program during a fiscal program year;
- (ii) an academic assessment establishing an Entering Functioning Level; and
- (iii) an adult education CCRP with an established goal and a defined funding code.

(b) An enrollee's status is based on the last date that the items set forth in Subsections R277-733-3(10)(a)(i) through (iii) were entered into UTopia.

(11) "English Language Learner" or "ELL" means an individual:

- (a) who has limited ability in reading, writing, speaking, or comprehending the English language and whose native language is a language other than English; or
- (b) who lives in a family or community where a language

other than English is the dominant language.

(12)(a) "Fee" means any charge, deposit, rental, or other mandatory payment, however designated, whether in the form of money or goods.

(b) Admission fees, transportation charges, and similar payments to third parties are fees if the charges are made in connection with an activity or function sponsored by or through an adult education program.

(c) All fees are subject to approval by an eligible provider's governing board.

(13) "High School Equivalency Exam" or "HSE" means a Board approved examination whose modules are aligned with current high school core standards and adult education College and Career Readiness standards.

(14)(a) "Other eligible adult education student" means an individual 16 to 19 years of age whose high school class has not graduated and who is counted in the regular school program, receiving instruction in both a traditional and adult education program.

(b) The Superintendent shall pro-rate and provide a credit to an adult education program for funds generated for an other eligible adult education student, weighted pupil unit (WPU) and collected fees.

(15) "Out-of-school youth" means a student 16 years of age or older who has not graduated from high school and is no longer enrolled in a K-12 program of instruction.

(16) "Teachers of English to Speakers of Other Languages" or "TESOL" means a credential for teachers of ELL students.

(17) "Utah High School Completion Diploma" means a diploma issued by the Board and distributed by a Board approved contractor to an individual who has passed all subject modules of an HSE exam at an HSE testing center.

(18) "UTopia" means the Utah Online Performance Indicators for Adult Education statewide database.

(19)(a) "Waiver release form" means a form signed by an adult education student allowing for release of the student's CCRP and personal data, including social security number and HSE scores, for data matching purposes with partners including:

- (i) the Department of Workforce Services;
- (ii) higher education institutions;
- (iii) the Utah State Office of Rehabilitation; and
- (iv) a Board approved HSE contractor.

(b) A signed waiver release allows a student's education records to be shared with other adult education programs or interested agencies for the purpose of skill development, job training, career planning, or other purposes if specified in the waiver release form.

(20) "Weighted pupil unit" or "WPU" means the basic per pupil unit used to calculate the amount of state funds for which a school district is eligible.

R277-733-4. Federal Adult Education Funds.

The Superintendent shall follow the standards and procedures contained in AEFLA and the WIOA state plan adopted by the Board pursuant to AEFLA to administer both federal and state funding of adult education programs.

R277-733-5. Program Standards.

(1) Adult education programs shall comply with state and federal law and administrative regulations and follow the procedures contained in the Utah Adult Education Policies and Procedures Guide.

(2) Adult education programs shall make reasonable efforts to:

(a) market and inform prospective students within their geographic areas of the availability of adult education programs; and

(b) provide enrollment information to prospective

students.

(3)(a) Adult education programs may offer adult education services to a qualifying individual whose primary residence is located in communities closely bordering Utah if the student's circumstances are not conducive to commuting to the bordering state's closest adult education program.

(b) An adult education program shall not charge tuition to a student receiving services in accordance with Subsection (3)(a).

(4) Adult education programs shall make reasonable efforts to schedule classes at sites and times that meet the needs of adult education students.

(5)(a) Each eligible adult education student shall have a written CCRP defining the student's goals based upon:

- (i) a complete academic assessment;
- (ii) prior academic achievement;
- (iii) work experience; and
- (iv) an established entering functioning level.

(b) A designated program official shall review a student's plan and waiver release form annually with the student.

(6) Adult education staff shall only teach courses identified in R277-733-8.

(7) The Superintendent shall evaluate programs for compliance through:

- (a) tri-annual site monitoring visits;
- (b) monthly desk monitoring; and
- (c) additional monitoring as needed.

(8) Adult education program staff, administrators, teachers, instructors, and counselors shall have appropriate qualifications for their assignments.

(9)(a) An eligible provider may consider a staff member's teaching certificate and endorsement in evaluating the appropriateness of the staff member's assignment.

(b) Notwithstanding Subsection (9)(a) an eligible provider may assign staff members to teach in circumstances not generally covered by their teaching certificate and endorsement under appropriate circumstances, such as placing an elementary teacher to teach adult students who are performing academically at an elementary level in certain subjects.

(c) An individual teaching an adult education high school completion class shall hold a valid Utah elementary or secondary education license and may issue adult education high school completion credits in multiple subjects.

(d) A non-licensed individual providing instruction in ELL, ABE, HSE preparation, or AHSC classes shall instruct under the supervision of a licensed program employee.

(10) A non-licensed individual with a post-secondary degree may only be considered for a teaching position by an eligible provider after approval for participation in the Alternative Route to Licensure program under R277-518 and R277-503-4; or

(11) An eligible provider may consider an individual for employment who has TESOL credentials in lieu of a Utah teaching license solely in an adult education program funded to provide ELL services.

R277-733-6. Fiscal Procedures.

(1) The Superintendent shall allocate state funds for adult education in accordance with Section 53A-17a-119.

(2) No eligible LEA shall receive less than its portion of an eight percent base amount of the state appropriation if:

(a) the LEA provided instructional services approved by the Board to eligible adult students during the preceding fiscal year; or

(b) the LEA is preparing to offer services to eligible adult students, provided that the LEA's preparation period does not exceed two years.

(3) Funds appropriated for adult education programs shall be subject to Board accounting, auditing, and budgeting rules

and policies.

(4) An LEA may carry over to the next fiscal year ten percent or \$50,000, whichever is less, of state adult education funds allocated to the LEA's adult education programs not expended in the current fiscal year with written approval from the Superintendent.

(5)(a) An LEA shall submit a request to carry over funds for approval by August 1 annually.

(b) The Superintendent shall prepare a revised budget incorporating approved carryover amounts no later than September 1 in the year requested.

(6) The Superintendent may consider excess funds in determining an LEA's allocation for the next fiscal year.

(7) The Superintendent shall recapture fund balances in excess of 10 percent or \$50,000 no later than February 1 annually.

(8) The Superintendent shall reallocate funds recaptured in accordance with Subsection (7) to LEA adult education programs through the supplemental award process based on need and effort as determined by the Board consistent with Subsection 53A-17a-119(3).

(9)(a) The Superintendent shall develop uniform forms, deadlines, program reporting and accounting procedures, and guidelines to govern state and federally funded adult education programs.

(b) The Superintendent shall update the Utah Adult Education Policies and Procedures Guide annually and make the guide available on the Board adult education website.

(10)(a) The Superintendent shall provide a competitive bidding process for an eligible provider to apply for federal adult education funds.

(b) The Superintendent shall only fund an eligible provider following an award under Subsection (10)(a) on a reimbursement basis.

(c) An eligible provider is subject to all laws and regulations regarding adult education funds, which are applicable to an LEA.

R277-733-7. Adult Education Pupil Accounting.

(1) A district administered adult education program shall receive WPU funding for a student at the rate of 990 clock hours of membership per one weighted pupil for a student who is a resident of a Utah school district and meets the following criteria:

(a) is at least 16 years of age but less than 19 years of age;

(b) has not received a high school diploma or a Utah High School Completion Diploma;

(c) intends to graduate from a K-12 high school; and

(d) attends a CCRP meeting with his school counselor, school administrator or designee, and parent or legal guardian to discuss the appropriateness of the student's participation in adult education; or

(2) A district may additionally receive WPU funding for a student at the rate of 990 clock hours of membership per one weighted pupil uni for a resident student who meets the following criteria:

(a) is 19 years of age or older;

(b) has not received a high school diploma but whose high school class has graduated;

(c) intends to graduate from a K-12 high school; and

(d) has written approval from all parties following consultation with the student's parent or guardian.

(2) Student attendance up to 990 clock hours of membership is equivalent to 1 FTE per year.

(3) The Superintendent shall prorate the clock hours of students enrolled part-time

(4) As an alternative, a district may generate equivalent WPUs for competencies mastered with a district plan approved by the Superintendent.

(5)(a) A student may only be counted in average daily membership once on any day.

(b) If a student's day is part-time in the regular school program and part-time in the adult education program, a district shall report the student's membership on a prorated basis for each program.

(c) A district may not receive funding for a student for more than one regular WPU for any school year.

(6) If an eligible adult education student as specified in R277-733-3(8)(a)(iv) enrolls in an adult education program:

(a) The district may not receive WPU funding for the student's participation in an adult education program;

(b) The student may be eligible for adult education state funding;

(c) The student shall be presented with information prior to or at the time of enrollment in an adult education program that defines the consequences of the student's decision, including the following:

(i) The student may receive an Adult Education Secondary Diploma upon completion of the minimum required Carnegie units of credit as defined by the adult education program;

(ii) The student may earn a Utah High School Completion Diploma upon successful passing of an HSE exam; or

(iii) The student may, at the discretion of the district, return to his regular high school prior to the time his class graduates with the understanding and expectation that all necessary requirements for the traditional k-12 diploma shall be completed, provided that the student:

(A) is released from the adult education program;

(B) has not completed the requirements necessary for an Adult Education Secondary Diploma; and

(C) has not successfully passed an HSE exam and has not received a Utah High School Completion Diploma;

(d) The student may not return to a k-12 high school after receiving an Adult Education Secondary Diploma;

(e) The student is not eligible to return to a k-12 high school after receiving a Utah High School Completion Diploma unless it is required for the provision of a free appropriate public education (FAPE) under the IDEA.

(f) A district shall report a student who has successfully completed an Adult Education Secondary Diploma or a Utah High School Completion Diploma as a graduate for k-12 graduation (AYP) outcomes.

(g) The student may take an HSE exam in accordance with the provisions of R277-702.

R277-733-8. Program, Curriculum, Outcomes and Student Mastery.

(1) The Utah Adult Education Program shall offer courses consistent with the Elementary and Secondary General Core under R277-700.

(2) The core standards may be modified or adjusted to meet the individual needs of an adult education student.

(3) An LEA shall develop written course descriptions for AHSC required and elective courses for all adult education program classes taught, consistent with the core standards and Utah adult education college and career readiness standards, as provided by the Superintendent.

(4) The Superintendent, in cooperation with eligible providers, shall develop written course descriptions for HSE exam preparation, ELL and ABE courses based on Utah's core standards, modified for adult learners.

(5) Course descriptions shall stress content mastery rather than completion of predetermined seat time in a classroom.

(6) Adult high school completion education shall include the following prerequisite courses:

(a) ELL competency AEFLA levels one through six; or

(b) ABE competency AEFLA levels one through four.

(7) AHSC courses for students seeking an Adult Education

Secondary Diploma shall meet federal AEFLA AHSC Levels I and II competency requirements with a minimum completion of 24 credits consistent with cores standards and adult education college and career readiness standards under the direction of a Utah licensed teacher as provided in the Utah Adult Education Policies and Procedures Guide.

(8) The Superintendent and eligible providers shall disseminate clear information regarding revised adult education graduation requirements.

(9) An adult education student receiving education services in a state prison or jail education program may graduate with an Adult Education Secondary Diploma upon completion of the state required 24.0 units of credit required under R277-700 and:

- (a) completed credits;
- (b) demonstrated course competency; or
- (c) a Utah High School Completion Diploma with a successful passing score on an HSE exam consistent with the student's adult education CCRP.

(10) An eligible provider may modify Adult Education Secondary Diploma graduation requirements to meet unique educational needs of an adult student with:

- (a) documented disabilities through an IEP from age 16 until the student's 22nd birthday; or
- (b) an adult education CCRP.

(11) A student's IEP or adult education CCRP shall document the nature and extent of modifications, substitutions, or exemptions made to accommodate the student's disabilities.

(12) Modified graduation requirements for an individual student shall:

- (a) be consistent with the student's IEP or CCRP;
- (b) be maintained in the student's adult education files; and
- (c) maintain the integrity and rigor expected for AHSC graduation.

(13) An LEA shall establish policies allowing or disallowing adult education student participation in graduation activities or ceremonies.

(14) An adult education student may only receive an Adult Education Secondary Diploma earned through a Utah adult education program accredited through a Board-approved organization.

(15) An adult education program shall accept credits and grades awarded to a student without alteration from other accredited state-recognized adult education programs or eligible providers approved by the Superintendent.

(16) An adult education program may establish reasonable timelines and may require adequate and timely documentation of authenticity for credits and grades submitted from other eligible providers.

(17) An LEA adult education program is the final decision-making authority for the awarding of credit and grades from non-accredited sources.

(18) An adult education program shall provide instruction that allows a student to transition between sites in a seamless manner.

(19) An adult education program shall offer an adult education student seeking a Utah High School Completion Diploma a course of academic instruction designed to prepare the student to take an HSE exam.

(20) The Superintendent shall award a Utah High School Completion Diploma if a student passes an HSE exam.

(21) Notwithstanding receipt of the Utah High School Completion Diploma a student may still be entitled to a free appropriate public education under IDEA requirements.

(22) Following completion of requirements for a Utah Adult Education Secondary Diploma or a Utah High School Completion Diploma, an adult education student may only continue in an adult education program to improve their basic literacy skills if:

(a) the student's academic skills are less than 9.0 grade level in an academic area of reading, math or English;

(b) the student lacks sufficient mastery of basic educational skills to enable the student to function effectively in society; and

(c) the focus of the continued instruction is limited solely to literacy in reading, math or English for a maximum of 120 instructional contact hours.

R277-733-9. Adult Education Programs--Tuition and Fees.

(1) Any adult may enroll in an adult education class consistent with Section 53A-15-404.

(2) An eligible provider may charge tuition and fees for ABE, HSE exam preparation, AHSC, or ELL courses in an amount not to exceed \$100 annually per student based on the student's ability to pay as determined by federal free and reduced lunch guidelines under the Richard B. Russell National School Lunch Act, 42 USC Section 1751, et seq.

(3) A school board or board of trustees of an eligible provider shall determine reasonable and necessary student fees and tuition on an annual basis.

(4) An eligible provider shall provide potential adult education program students adequate notice of tuition and fees through public posting.

(5) An eligible provider shall specifically use collected fees and tuition to provide additional adult education and literacy services that the provider would otherwise be unable to provide.

(6) An eligible provider receiving state or federal adult education funds shall provide annual written assurances on a form approved by the Superintendent that all fees and tuition collected and submitted for accounting purposes are:

(a) returned or delegated with the exception of indirect costs to the local adult education program;

(b) used solely and specifically for adult education programming; and

(c) not withheld and maintained in a general maintenance and operation fund.

(7)(a) An eligible provider shall spend all collected fees and tuition generated from the previous fiscal year in the adult education program in the ensuing program year.

(b) A district may not use funds identified in Subsection (7)(a) in calculating carryover fund balance amounts.

(8) An eligible provider may not count collected fees and tuition toward meeting federal matching, cost sharing, or maintenance of effort requirements related to the program's award.

(9) Annually, eligible providers shall report to the Superintendent all fees and tuition collected from students associated with each funding source.

(10) An eligible provider shall not commingle or report fees and tuition collected from adult education students with community education funds or any other public education fund.

R277-733-10. Allocation of Adult Education Funds.

(1) The Superintendent shall distribute adult education state funds to an LEA offering adult education programs consistent with percentages defined in the Utah Adult Education Policies and Procedures Guide.

(2)(a) The Superintendent shall distribute supplemental support to an LEA adult education program with no carryover funds, which receives less than one percent of the state allocation as indicated on the state allocation table.

(b) The Superintendent shall accept and process applications for supplemental funds annually between October 15 and October 31.

(c) An LEA receiving supplemental support shall use the awarded funds for special program needs or professional development, as determined by the Superintendent's evaluation

of the LEA's written request and need.

(d) An LEA may apply for the balance of supplemental funds for special program needs or professional development between November 1 and March 1 annually.

(e) Following review of a written request submitted pursuant to Subsection (d), the Superintendent shall distribute funds based on need.

(f) The Superintendent shall add recaptured LEA funds that are greater than allowable carryover amounts to the available supplemental funds awarded to adult education programs based on the criteria defined in Subsection 2(a) through (e).

(3)(a) Adult education federal AEFLA funds shall be distributed based on a competitive application.

(b) The Superintendent shall base second or subsequent year AEFLA funding on performance criteria established in the Utah Adult Education Policies and Procedures Guide.

(4) The Superintendent may recommend that the Board withhold state or federal funds for noncompliance with:

- (a) Board rule;
- (b) adult education state policy and procedures;
- (c) associated reporting timelines; and
- (d) program monitoring outcomes, as defined by the Board, including:
 - (i) lack of program improvement; and
 - (ii) unsuccessful student outcomes.

R277-733-11. Adult Education Records and Audits.

(1) An LEA shall maintain official records regarding an eligible adult education student in accordance with state retention schedules SD17-25 and SD 17-32.

(2) An eligible provider shall maintain records for each student to validate student outcomes annually in accordance with the Utah Adult Education Policies and Procedures Guide.

(3) To ensure valid and accurate student data, all programs accepting state or federal adult education funds, or both, shall enter and maintain required student data in the UTopia data system.

(4) An eligible provider shall annually retain an independent auditor to:

- (a) audit student accounting records;
- (b) verify UTopia data entries; and
- (c) validate the cash controls over collection of student fees.

(5) An auditor retained pursuant to Subsection (4) shall submit a written report by September 15 annually to:

- (a) the eligible provider's governing board or board of trustees;
- (b) the Superintendent; and
- (c) the local adult education program director, if appropriate.

(6) In the event of an audit finding of non-compliance with state or federal law, regulation, or policy, a program shall prepare and submit to the Superintendent a written corrective action plan for each audit finding by October 15 annually.

(7) The Superintendent shall monitor and assist a program in the resolution of a corrective action plan.

(8) The Superintendent may recommend that the Board terminate a program's state or federal funding for failure to resolve audit findings in accordance with R277-114.

(9) Independent audit reporting dates, forms, and procedures are available in the state of Utah Legal Compliance Audit Guide provided to an eligible provider by the Superintendent in cooperation with the State Auditor's Office and published under the heading of APPC-5.

(10) The Superintendent may review for cause an eligible provider's records and practices for compliance with the law and this rule.

R277-733-12. State Workforce Development Board.

(1) The Superintendent shall represent adult education programs on the State Workforce Development Board as a voting member, in accordance with WIOA.

(2) The Superintendent may assign Board staff to State Workforce Development Board WIOA committees to the purpose of implementation of the State's WIOA Unified Plan.

R277-733-13. Oversight, Monitoring, Evaluation, and Reports.

The Board may designate no more than two percent of the total legislative appropriation for adult education services to be used specifically by the Superintendent for oversight, monitoring, and evaluation of adult education programs and their compliance with law and regulation.

KEY: adult education

August 7, 2017

Notice of Continuation June 6, 2017

**Art X Sec 3
53A-15-401
53A-1-402(1)
53A-1-401
53A-1-403.5
53A-17a-119
53A-15-404**

R277. Education, Administration.**R277-735. Corrections Education Programs.****R277-735-1. Authority and Purpose.**

(1) This rule is authorized by:

(a) Utah Constitution Article X, Section 3, which vests general control and supervision over public education in the Board;

(b) Section 53A-1-403.5, which makes the Board, along with the Utah Department of Corrections, responsible for the education of inmates in custody; and

(c) Section 53A-1-401, which allows the Board to make rules to execute the Board's duties and responsibilities under the Utah Constitution and state law.

(2) The purpose of this rule is to specify operation standards and procedures for inmates in corrections education programs that are the responsibility of the public school system.

R277-735-2. Incorporation of Utah Adult Education Policies and Procedures Guide by Reference.

(1) The rule incorporates by reference the Utah Adult Education Policies and Procedures Guide, June 2016 Revision, which provides day-to-day operating standards and technical assistance to eligible providers for operation of adult education programs.

(2) A copy of the guide is located at:

(a) <http://www.schools.utah.gov/adulted/Directors---Coordinators/Policies-and-Procedures-and-Reports.aspx>; and

(b) the Utah State Board of Education.

R277-735-3. Definitions.

(1) "Custody" means the status of being legally in the control of another adult person or a public agency.

(2) "Education Contracts funds" means funds appropriated annually by the Legislature to be used partly for corrections education.

(3) "FERPA" means the Family Educational Rights and Privacy Act, 20 USC 1232g, and its implementing regulations.

(4) "Inmate" means an offender who is incarcerated in state or county correctional facilities located throughout the state.

(5) "Utah Online Performance Indicators for Adult Education" or "UTopia" means a statewide database for tracking adult education student progress and outcomes.

R277-735-4. Procedures for Providing Services.

(1) The Board may contract to provide educational services for inmates with:

(a) local school boards;

(b) state post-secondary educational institutions;

(c) other state agencies; or

(d) private providers recommended by a local school board.

(2) A contract made in accordance with Subsection (1) shall be in writing and shall provide for:

(a) services to students in an appropriate environment for student behavior and educational performance;

(b) compliance with relevant Board standards;

(c) program monitoring by the Superintendent in accordance with R277-733; and

(d) coordination of services with non-custodial programs to enable an inmate in custody to continue the inmate's public school education with minimal disruption following discharge.

(3) A school district may sub-contract with local educational service providers for the provision of educational services to students in custody.

(4) Custodial status alone does not qualify an individual for services under the IDEA.

(5) When a student inmate is transferred to a new program, the sending program shall update and finalize all school records in UTopia releasing the student's records as soon as possible

after receiving notice of the transfer.

(6) An educational service provider shall only disclose educational records of a student inmate, before or after release from custody, consistent with (FERPA).

(7) Corrections education programs shall adhere to the same overarching program standards and practices defined for all adult education programs, consistent with R277-733, unless otherwise noted herein.

R277-735-5. Fiscal Procedures.

(1) An inmate receiving educational services by or through a school district shall be a student of that school district for funding purposes.

(2) The Superintendent shall allocate state corrections education funds to school districts on the basis of annual applications.

(3) A program receiving funds approved for a corrections education project shall only expend funds for the purposes described in the respective funding application.

(4) Education Contracts funds used for corrections education shall be subject to Board accounting, auditing and budgeting rules and policies.

(5) Ten percent or \$50,000, whichever is less, of state funds designated for corrections education not expended in the current fiscal year may be carried over and spent by a school district in the next fiscal year with written approval from the Superintendent.

(6) The Superintendent shall establish a timeline for submission and approval of school district budgets and carry over requests.

(7)(a) The Superintendent may consider excess funds in determining a school district's allocation for the next fiscal year.

(b) The Superintendent shall recapture fund balances in excess of 10 percent or \$50,000 annually no later than February 1 and reallocate funds to school district corrections education programs through the supplemental award process based on need and effort consistent with R277-733.

R277-735-6. Allocation of Education Contracts Funds Designated for Corrections Education.

(1) The Superintendent may not allocate more than four percent of the total legislative education contracts funding appropriated for adult corrections education administrative services.

(2) The Superintendent shall use funds allocated in accordance with Subsection (1) for oversight, monitoring, and evaluation of corrections adult education program compliance with law and this rule.

(3) The Superintendent shall annually calculate:

(a) the total number of incarcerated offenders in the custody of the Utah Department of Corrections;

(b) the percentage of incarcerated offenders housed in county jails; and

(c) the percentage of incarcerated offenders housed at prison sites.

(4) The Superintendent shall use the calculations made under Subsection (3) to determine the allocation of education contracts funds to school districts.

(5) An eligible school district shall receive a base amount of \$10,000 for each correctional facility in which they provide services.

(6) The Superintendent shall prorate the balance of the education contracts funds allocation to school districts based upon adult education UTopia data reporting of the average number of state inmates receiving educational services from August 1 through March 1 of the prior school year.

R277-735-7. Program, Curriculum, Outcomes and Student Mastery.

(1) Corrections education programs shall provide programs that allow students to transition between correctional sites in a seamless manner.

(2)(a) An adult education student receiving education services in a state correctional facility education program may graduate with a school district adult education secondary diploma upon completion of the state required minimum units of credit under R277-700.

(b) A student in custody may meet graduation requirements through:

(i) completed credits; or

(ii) demonstrated course competency consistent with a student's plan for college and career readiness in accordance with R277-733.

(3) An adult student in custody seeking an adult high school diploma shall have the minimum credits defined in R277-705.

(4) A district shall employ a qualified Utah licensed educator to teach corrections education courses.

R277-735-8. Confidentiality.

(1) A transcript or diploma prepared for an inmate in custody shall:

(a) include the name of the contracted educational agency which also provides service to non-custodial offenders; and

(b) not reference the inmate's custodial status.

(2)(a) A district or corrections education provider shall keep an inmate's education records which refer to custodial status, inmate court records, and related matters separate from permanent school records.

(b) A district shall destroy or seal an inmate's education records upon order of a court of competent jurisdiction.

(3) A district or corrections education provider may only provide access to education records in accordance with FERPA.

R277-735-9. Adult Education Standards.

Corrections adult education programs shall meet program standards defined in R277-733 and the Utah Adult Education Policies and Procedures Guide.

KEY: public education, custody, inmates

August 7, 2017

Notice of Continuation June 6, 2017

Art X Sec 3

53A-1-403.5

53A-1-401

R277. Education, Administration.**R277-753. LEA Reporting Requirements for Section 504 Students.****R277-753-1. Authority and Purpose.**

(1) This rule is authorized by:

(a) Utah Constitution Article X, Section 3, which vests general control and supervision over public education in the Board;

(b) Section 53A-1-401, which allows the Board to make rules to execute the Board's duties and responsibilities under the Utah Constitution and state law; and

(c) Subsection 53A-17a-112.2(2)(a), which directs the Board to make rules for implementation of a reimbursement program for special education funds to address Section 504 accommodations.

(2) The purpose of this rule is to establish reporting requirements for LEAs providing Section 504 accommodations to students.

R277-753-2. Definitions.

(1) "Autism" means a disability of verbal, non-verbal or social interaction that substantially limits one or more major life activities and does not require specialized instruction under special education services.

(2) "Brain injury impairment" or "Concussion impairment" means a short term disability of the brain caused by an external physical force that substantially limits one or more major life activities, and which adversely affects a student's access to the student's education.

(3) "Hearing impairment" means a hearing disability that substantially limits one or more major life activity, which may require assistive technology but does not require specialized instruction under special education services.

(4) "Learning impairment" means a learning disability, which includes, but is not limited to, dyslexia, dysgraphia, and dyscalculia, that substantially limits one or more major life activities, but does not require specialized instruction under special education services.

(5) "Major bodily function impairment" means an impairment to any of the following functions that adversely limit a student's access to the student's education:

- (a) immune system function;
- (b) normal cell growth;
- (c) genitourinary function;
- (d) bladder function;
- (e) brain function;
- (f) circulatory function;
- (g) endocrine function;
- (h) lymphatic function;
- (i) special sensory organ and skin function;
- (j) digestive function;
- (k) bowel function;
- (l) neurological function;
- (m) respiratory function;
- (n) cardiovascular function;
- (o) hemic function;
- (p) musculoskeletal function; and
- (q) reproductive function.

(6) "Medical impairment" means a disability that is chronic or acute in nature, which may be active or in remission, and which substantially limits one or more major life activities, including, but not limited to:

- (a) allergies;
- (b) asthma;
- (c) attention deficit disorder or attention deficit hyperactivity disorder;
- (d) chemical sensitivities;
- (e) diabetes;
- (f) epilepsy;

- (g) a heart condition;
- (h) hemophilia;
- (i) lead poisoning;
- (j) leukemia;
- (k) cancer;
- (l) arthritis;
- (m) nephritis;
- (n) rheumatic fever;
- (o) sickle cell anemia;
- (p) Tourette syndrome;
- (q) HIV/AIDS; or
- (r) an acquired brain injury adversely affecting a student's access to the student's education, which may result from health problems such as:

- (i) an hypoxic event;
 - (ii) encephalitis;
 - (iii) meningitis;
 - (iv) brain tumor; or
 - (v) stroke.
- (7) "Mental health impairment" means a mental disability that is chronic or acute in nature, and which substantially limits one or more major life activities, including, but not limited to:
- (a) anxiety;
 - (b) attention deficit disorder or attention deficit hyperactivity disorder;
 - (c) depression;
 - (d) post-traumatic stress disorder; or
 - (e) emotional or mental illnesses.

(8) "Orthopedic impairment" means a physical disability, which may be on-going or short term in nature, that substantially limits one or more major life activities, and which adversely affects a student's access to the student's education.

(9) "Other impairment" means any other disability not specifically defined in this rule, which substantially limits one or more major life activities.

(10) "Section 504" means section 504 of the Vocational Rehabilitation Act of 1973, 29 U.S.C. 701, et seq., which guarantees certain rights to disabled students.

(11) "Utah eTranscript and Record Exchange" or "UTREx" means a system that allows individual detailed student records to be exchanged electronically between public education LEAs and the Board.

(12) "Utah Program Improvement Planning System" or "UPIPS" is a secure website utilized by the Board Special Education Services section to collect compliance and fiscal LEA data regarding students with disabilities, required under state and federal law.

R277-753-3. LEA Section 504 Reporting Requirements.

(1) An LEA shall include a count of students with Section 504 accommodations in its daily UTREx submission.

(2) An LEA shall report financial costs incurred as a result of Section 504 accommodations to the Superintendent through UPIPS by June 30 annually.

(3) An LEA's data submissions under this rule shall be broken down in the following categories:

- (a) Autism;
- (b) Brain Injury or Concussion Impairment;
- (c) Hearing Impairment;
- (d) Learning Impairment;
- (e) Major Bodily Function Impairment;
- (f) Medical Impairment;
- (g) Mental Health Impairment;
- (h) Orthopedic Impairment; and
- (i) Other Impairment.

KEY: reporting, requirements, Section 504 August 7, 2017

**Art X Sec 3
53A-1-401**

R277. Education, Administration.**R277-911. Secondary Career and Technical Education.****R277-911-1. Authority and Purpose.**

(1) This rule is authorized by:

(a) Utah Constitution Article X, Section 3, which vests general control and supervision over public education in the Board;

(b) Section 53A-1-401, which allows the Board to make rules to execute the Board's duties and responsibilities under the Utah constitution and state law;

(c) Section 53A-15-202, which allows the Board to establish minimum standards for CTE programs in the public education system; and

(d) Sections 53A-17a-113 and 53A-17a-114, which direct the Board to distribute specific amounts and percentages for specific CTE programs and facilitate administration of various programs.

(2) This rule establishes standards and procedures for LEAs seeking to qualify for funds administered by the Board for CTE programs in the public education system.

R277-911-2. Definitions.

(1) "Aggregate membership" means the sum of all days in membership during a school year for:

- (a) the student;
- (b) the program;
- (c) the school;
- (d) the LEA; or
- (e) the state.

(2) "Approved program" means a program annually approved by the Board through the consent calendar process that meets or exceeds the state program standards or outcomes for career and technical education programs.

(3) "Bureau of Apprenticeship and Training" means a branch office for apprenticeship administered by the United States Department of Labor and located in Salt Lake City.

(4)(a) "Career and technical education" or "CTE" means organized educational programs that:

- (i) prepare individuals for a wide range of high-skill, high-demand careers;
- (ii) provide all students with a seamless education system from public education to post-secondary education, driven by a Plan for College and Career Readiness; and
- (iii) provide students competency-based instruction, hands-on experiences, and certified occupational skills, culminating in further education and meaningful employment.

(b) CTE areas of study include:

- (i) agriculture;
- (ii) business;
- (iii) family and consumer sciences;
- (iv) health science;
- (v) information technology;
- (vi) marketing;
- (vii) skilled and technical sciences; and
- (viii) technology and engineering education.

(5)(a) "CTE pathway" means a planned sequence of courses within a program of study to assure strong academic and technical preparation connecting high school course work to work beyond high school.

(b) A CTE pathway ensures that a student will be prepared to take advantage of the full range of post-secondary options, including:

- (i) on-the-job training;
- (ii) certification programs; and
- (iii) two- and four-year college degrees.

(6)(a) "Course" means an individual CTE class structured by state-approved standards.

(b) An approved course may require one or two periods for up to one year.

(c) Courses may be completed by demonstrated competencies or by course completion.

(7)(a) "Entry-level" means a set of tasks identified and validated by workers and employers in an occupation as those of a beginner in the field.

(b) Entry-level skills are a limited subset of the total set of tasks performed by an experienced worker in the occupation.

(c) Competent performance of entry-level tasks enhances employability and initial productivity.

(8) "Extended year program" means CTE programs no longer than 12 weeks in duration, offered during the summer recess, and supported by extended-year or other CTE funds.

(9) "CTE Maintenance of Effort" or "MOE" means the expenditure plan outlined in Subsection R277-911-4(1).

(10) "Program" means a combination of CTE courses that:

(a) provides the competencies for specific job placement or continued related training; and

(b) is outlined in the Plan for College and Career Readiness using all available and appropriate high school courses.

(11) "Program completion" means the student completion of a sequence of approved courses, work-based learning experiences, or other prescribed learning experiences as determined by the Plan for College and Career Readiness.

(12) "Regional consortium" means the LEAs, applied technology colleges, colleges and universities within the regions that approve CTE programs.

(13) "Registered apprenticeship" means a training program that:

(a) includes on-the-job training in a specific occupation combined with related classroom training; and

(b) has approval of the Bureau of Apprenticeship and Training.

(14) "Related training" means a course or program that is:

- (a) directly related to an occupation;
- (b) compatible with apprenticeship training;
- (c) taught in a classroom; and
- (d) approved by the Bureau of Apprenticeship and Training.

(15) "Scope and sequence" means the organization of all CTE courses and related academic courses into programs within the high school curriculum that lead to:

- (a) specific skill certification;
- (b) job placement;
- (c) continued education; or
- (d) training.

(16)(a) "Skill certification" means a verification of competent task performance.

(b) Skills certification is provided by an approved state or national program certification process.

(17) "Weighted pupil unit" or "WPU" means the basic unit used to calculate the amount of state funds for which an LEA is eligible.

(18) "Work-based learning" or "WBL" means a continuum of awareness, exploration, preparation, and training activities that combine structured learning and authentic work experiences implemented through industry and education partnerships.

R277-911-3. CTE Program Approval.

(1)(a) The Superintendent shall approve CTE programs based on verified training needs of the area and the competencies necessary to provide occupational opportunities for students.

(b) Programs are supported by a data base, including:

- (i) local, regional, state, and federal manpower projections;
- (ii) student occupational/interest surveys;
- (iii) regional job profile;
- (iv) advisory committee information; and

(v) follow-up evaluation and reports.
 (2) LEA CTE directors shall meet the requirements specified in R277-911.

(3) Within available resources, instructional materials, including textbooks, reference materials, and media, shall reflect current technology, processes, and information for the CTE programs.

(4)(a) An LEA shall provide CTE guidance, counseling, and Board approved testing for students enrolled in CTE programs.

(b) An LEA shall develop a written plan for placement services with the assistance of local advisory committees, business and industry, and the Department of Workforce Services.

(c) An LEA shall develop a Plan for College and Career Readiness for all students, which shall include:

(i) a student's education occupation plans (grades 7-12), including job placement when appropriate;

(ii) all Board, local board and local charter board graduation requirements;

(iii) evidence of annual parent, student, and school representative involvement;

(iv) attainment of approved workplace skill competencies; and

(v) identification of a CTE post-secondary goal and an approved sequence of academic and CTE courses.

(5)(a) An LEA shall use curricula and instruction that is directly related to business and industry validated competencies.

(b) An LEA shall use a valid skill certification process to verify successful completion of competencies.

(c) An LEA shall provide instruction in proper and safe use of any equipment required for skill certification within the approved program.

(6) An LEA shall provide and safely maintain equipment and facilities, consistent with the validated competencies identified in the instruction standard and applicable state and federal laws.

(7)(a) Counselors and instructional staff shall hold valid Utah teaching licenses with endorsements appropriate for the programs they teach.

(b) Licenses and endorsements required under Subsection (7)(a) may be obtained through an institutional recommendation or through occupational and educational experience verified by the Board's licensure process.

(c) CTE program instructors shall keep technical and professional skills current through business and industry involvements in order to ensure that students are provided accurate state-of-the-art information.

(8) An LEA shall conduct CTE programs consistent with Board policies and state and federal laws and regulations on access that prohibit discrimination on the basis of:

- (a) race;
- (b) creed;
- (c) color;
- (d) national origin;
- (e) religion;
- (f) age;
- (g) sex; and
- (h) disability.

(9)(a) An LEA shall establish an active advisory council to review all CTE programs annually.

(b) An advisory council may serve several LEAs or a region.

- (c) An advisory council reviews:
 - (i) program offerings;
 - (ii) quality of programs; and
 - (iii) equipment needs.

(10) A program advisory committee made up of individuals who are working in the occupational area shall

support each state-funded approved CTE program at the LEA or regional level.

(11) LEAs are encouraged to make training available through nationally-chartered CTE student leadership organizations in each area of study.

(12) An LEA, with oversight by local program advisory committee members, shall make an annual evaluation of its CTE programs.

R277-911-4. Disbursement and Expenditure of CTE Funds -- General Standards.

(1) To be eligible for state CTE program funds, an LEA shall first expend for CTE programs an amount equivalent to the regular WPU for students in approved CTE programs, grades nine through twelve, based on prior year aggregate membership in funded CTE programs, times the current year WPU value, less the amount for:

- (a) college and career awareness;
- (b) work-based learning; and
- (c) comprehensive counseling and guidance.

(2) An LEA may thereafter expend State CTE program funds only for approved CTE programs, grades nine through twelve.

(3) An LEA that does not meet MOE may be subject to a corrective action plan and potential reduction of funds or penalty in accordance with R277-114.

R277-911-5. Disbursement of Funds -- Added Cost Funds.

(1)(a) WPU's shall be allocated for the added instructional costs of approved CTE programs operated or contracted by an LEA.

(b) Programs and courses provided through technical colleges and higher education institutions do not qualify for added cost funds except for specific contractual arrangements approved by the Board.

(2)(a) Computerized or manually produced records for CTE programs shall be kept by:

- (i) teacher;
- (ii) class; and
- (iii) core code.

(b) Records described in Subsection (2)(a) shall show clearly and accurately the entry and exit date of each student and whether a student has been absent from a CTE class ten consecutive days.

(3) Added cost funds shall not be generated:

- (a) during bus travel;
- (b) until a student starts attending an approved CTE course;

(c) when a student has been absent, without excuse, for the previous 10 days.

(4) Approved CTE programs shall receive funds determined by prior year hours of membership for approved programs.

(5) Allocations under this R277-911-5 are computed using grades nine through twelve aggregate membership in approved programs for the previous year with a growth factor applied to LEAs experiencing growth of one percent or greater in grades nine through twelve except as provided by R277-462 and R277-916.

(6) Added cost funds shall be used to cover the added CTE program instructional costs of LEA programs.

(7) An LEA that does not comply with the requirements of this Subsection may be subject to a corrective action plan and potential reduction of funds or penalty in accordance with R277-114.

R277-911-6. Disbursement of Funds -- Skill Certification.

(1) An LEA that demonstrates approved student skill certification may receive additional compensation.

(2)(a) To be eligible for skill certification compensation, an LEA shall show its student completer has demonstrated mastery of standards, as established by the Board.

(b) An authorized test administrator shall verify student mastery of the skill standards.

(3) The Superintendent may only disburse skill certification compensation if an approved skill certification assessment is developed for the program.

R277-911-7. Disbursement of Funds -- CTE Leadership Organization Funds.

(1) Participating LEAs sponsoring CTE leadership organizations shall be eligible for a portion of funds set aside for these organizations.

(2) Qualifying CTE leadership organizations shall be nationally chartered and include:

(a) SkillsUSA (an association of Skilled and Technical Sciences Education students);

(b) DECA (Distributive Education Clubs of America);

(c) FFA (Future Farmers of America);

(d) HOSA (Health Occupations Students of America);

(e) FBLA (Future Business Leaders of America);

(f) FCCLA (Family, Career and Community Leaders of America); and

(g) TSA (Technology Students Association).

(3) Up to 1% of the state CTE appropriation for LEAs shall be allocated to eligible LEAs based on documented prior year student membership in approved CTE leadership organizations.

(4)(a) A portion of funds allocated to an LEA for CTE leadership organizations shall be used to pay the LEA's portion of statewide administrative and national competition costs.

(b) An LEA shall use the remaining amount available for the LEA's CTE leadership organization expenses.

R277-911-8. Disbursement of Funds -- School District and Charter School WPUs.

(1) The Superintendent shall allocate WPUs for costs of administration of CTE programs as described in this section.

(2)(a) The Superintendent shall distribute Twenty (20) WPUs to a school district for costs associated with the administration of CTE.

(b) To qualify, a school district shall employ a minimum one-half time CTE director.

(3)(a) To encourage multidistrict CTE administrative services, the Superintendent shall distribute 25 WPUs to a school district that consolidates CTE administrative services with one or more other school districts;

(b) To qualify, a participating school district shall employ a full-time CTE director.

(4)(a) The Superintendent shall distribute Twenty-five (25) WPUs to a single charter school acting as fiscal agent, to provide CTE administrative services to a group of at least 10 charter schools offering CTE pathways, grades 9-12.

(b) If more than 10 charter schools offer CTE pathways, the Superintendent shall distribute an additional 5 WPUs for each additional charter school over 10.

(c) To qualify, the charter school acting as fiscal agent must employ a full-time CTE director.

(5)(a) A district or charter school receiving additional WPUs under Subsection (3)(a) or (4)(a) shall annually submit to the Superintendent a Memorandum of Understanding with each partnering district or school, which shall include:

(i) a scope of work to be performed by the full-time CTE director for each LEA or school involved;

(ii) provisions for sharing data under the agreement, including provisions for protecting the privacy of student education records under FERPA;

(iii) maintenance of effort requirements; and

(iv) other information as directed by the Superintendent.

(b) The Superintendent may withhold funds from a district or charter school under Rule R277-114 for failure to submit a memorandum of understanding as required by this rule.

(6)(a) The Superintendent shall distribute 10 WPUs to a small school district consisting of only necessarily existent small high school(s), where multi-district CTE administration is not feasible.

(b) To qualify, a small school district shall assign a CTE director to a minimum of part-time CTE administration.

(7) To qualify for 10, 20 or 25 CTE administrative WPUs as provided in this Subsections (1) through (6), a CTE director shall:

(a) hold or be in the process of completing requirements for a Education Leadership License Area of Concentration described in R277-505;

(b) have an endorsement in at least one career and technical area listed in Rule R277-518; and

(c)(i) have four years of experience as a full-time career and technical educator; or

(ii) complete a prescribed professional development program provided by the Superintendent within a period of two years following board appointment as an LEA CTE director.

(8) In addition to WPUs appropriated under Subsections (1) through (6), the Superintendent shall allocate funds to each approved high school as described in Subsections (9) through (16):

(9) The Superintendent shall distribute 10 WPUs to a high school that:

(a) conducts approved programs in a minimum of two CTE areas specified in Subsection R277-911-1(4)(b);

(b) conducts a minimum of six different state-approved CTE courses including at least one CTE pathway; and

(c) has at least one approved career and technical student leadership organization.

(10) Consolidated courses in small schools may count as more than one course as approved by the Superintendent.

(11) The Superintendent shall distribute 15 WPUs to a high school that:

(a) conducts approved programs in a minimum of three CTE areas specified in Subsection R277-911-2(4)(b);

(b) conducts a minimum of nine different state-approved CTE courses including at least one CTE pathway; and

(c) has at least one approved CTE student leadership organization.

(12) Consolidated courses in small schools may count as more than one course as approved by the Superintendent.

(13) The Superintendent shall distribute 20 WPUs to a high school that:

(a) conducts approved programs in a minimum of four CTE areas specified in Subsection R277-911-2(4)(b);

(b) conducts a minimum of twelve different state-approved CTE courses including at least two CTE pathways; and

(c) has at least two approved CTE student leadership organization.

(14) Consolidated courses in small schools may count as more than one course as approved by the Superintendent.

(15) The Superintendent shall distribute 25 WPUs to a high school that:

(a) conducts approved programs in a minimum of five CTE areas specified in Subsection R277-911-2(4)(b);

(b) conducts a minimum of fifteen different state-approved CTE courses including at least two CTE pathways; and

(c) has at least three approved CTE student leadership organizations.

(16) Consolidated courses in small schools may count as more than one course as approved by the Superintendent.

(17)(a) A maximum of one approved alternative high school, as outlined in Rule R277-730, per school district may

qualify for funds under Subsection (12).

(b) LEAs sharing an alternative school shall receive a prorated share.

(18) Programs and courses provided through school district technical centers may not receive funding under this section.

R277-911-9. Disbursement of Funds -- School District Technical Centers.

(1)(a) The Superintendent may award a maximum of forty WPU's for each school district operating an approved school district center.

(b) To qualify under the approved school district technical center provision, the school district shall:

(i) provide at least one facility other than an existing high school as a designated school district technical center;

(ii) employ a full-time CTE administrator for the center;

(iii) enroll a minimum of 400 students in the school district technical center;

(iv) prevent unwarranted duplication by the school district technical center of courses offered in existing high schools, applied technology colleges, and higher education institutions;

(v) centralize high-cost programs in the school district technical center;

(vi) conduct approved programs in a minimum of five CTE areas specified in Subsection R277-911-1(4)(b); and

(vii) conduct a minimum of fifteen different state-approved CTE courses.

R277-911-10. Disbursement of Funds -- Summer CTE Agriculture Programs.

(1)(a) To receive state summer CTE agriculture program funds, an LEA shall submit to the Superintendent, an application for approval of the LEA's program.

(b) An LEA shall submit its application prior to the annual due date specified by the Superintendent each year.

(c) The Superintendent shall send notification of approval of an LEA's program within ten calendar days of receiving the application.

(2) A teacher of a summer CTE agriculture program shall:

(a) hold a valid Utah teaching license, with an endorsement in agriculture, as outlined in Subsection R277-911-3(7);

(b) develop a calendar of activities which shall be approved by LEA administration and reviewed by the Superintendent;

(c)(i) work a minimum of eight hours a day in the summer CTE agriculture program;

(ii) An LEA may approve exceptions which shall be reflected in the calendar of activities;

(d) not engage in other employment, including self-employment, which conflicts with the teacher's performance in the summer CTE agriculture program;

(e) develop and file a weekly schedule and a monthly report outlining accomplishments related to the calendar of activities with:

(i) the school principal;

(ii) the LEA CTE director; and

(iii) the Superintendent; and

(f) visit the participating students a minimum of two times during the summer program with a minimum average of four on-site visits to students.

(3) College interns may be approved to conduct summer CTE agriculture programs upon approval by the Superintendent.

(4) Students enrolled in the summer CTE agriculture program shall:

(a) have on file in the LEA office the student's Plan for College and Career Readiness goal related to agriculture;

(b) in conjunction with the student's parent or employer

and the teacher, develop an individual plan of activities, including a supervised occupational experience program;

(c) have completed the eighth grade; and

(d) have not have graduated from high school.

(5)(a) The Superintendent shall collect data from the program and staff of each LEA to ensure compliance with approved standards.

(b) An LEA shall submit to the Superintendent a final program report, on forms provided by the Superintendent on the annual due date specified by the Superintendent.

(6)(a) The Superintendent shall allocate Summer CTE agricultural funding to each LEA conducting an approved program for a minimum of 35 students lasting nine weeks.

(b) An LEA may receive funding for no more than nine weeks or 35 students.

(7) An LEA operating a program with fewer than 35 students per teacher or for fewer than nine weeks may only receive a prorated share of the summer CTE agricultural allocation.

R277-911-11. Disbursement of Funds - Comprehensive Counseling and Guidance; College and Career Awareness, and Work-Based Learning Programs.

(1) The Superintendent shall distribute funds to LEAs consistent with Section 53A-17a-113.

(2) An LEA shall spend funds distributed for comprehensive guidance consistent with Subsection 53A-1a-106(2)(b) and R277-462, which explain the purpose and criteria for student Plans for College and Career Readiness.

(3) An LEA may spend funds allocated under this section to fund work-based learning programs consistent with Rules R277-915 and R277-916.

(4) An LEA may spend funds allocated under this section to fund College and Career Awareness programs consistent with Rule R277-916.

KEY: career and technical education

August 7, 2017

Notice of Continuation June 6, 2017

Art X Sec 3

53A-15-202

53A-17a-113

53A-17a-114

R277. Education, Administration.**R277-923. American Indian and Alaskan Native Education State Plan Pilot Programs.****R277-923-1. Authority and Purpose.**

- (1) This rule is authorized by:
 - (a) Utah Constitution Article X, Section 3, which vests general control and supervision over public education in the Board; and
 - (b) Section 53A-31-404, which provides that the Board may make rules related to the pilot programs; and
 - (c) Section 53A-1-401, which allows the Board to make rules to execute the Board's duties and responsibilities under the Utah Constitution and state law.
- (2) The purpose of this rule is to provide:
 - (a) criteria for evaluating grant applications; and
 - (b) procedures for:
 - (i) a school district to apply to the Board to receive grant money; and
 - (ii) the review of the use of grant money.

R277-923-2. Definitions.

- (1) "American Indian and Alaskan Native concentrated school" has the same meaning as that term is defined in Section 53A-31-402.
- (2) "Program site" means the school where an LEA plans to use grant money and implement the LEA's program.

R277-923-3. Grant Application.

- (1) An LEA may apply for a grant described in Section 53A-31-404 by submitting an application to the Superintendent on or before the last Friday in May.
- (2) The Superintendent shall develop a grant application and make the grant application available to LEAs that meet the eligibility as an American Indian and Alaskan Native concentrated school.

R277-923-4. Procedure and Criteria for Awarding a Grant.

- (1) The Superintendent shall award:
 - (a) one American Indian and Alaskan Native Education State Plan Pilot Program grant to an LEA to serve one or more program sites for the five-year pilot program created in Subsection 53A-31-403(1); and
 - (b) one grant to an LEA to serve one or more program sites for the four-year pilot program created in Subsection 53A-31-403(2).
- (3) The Superintendent shall award a grant described in Subsection (1) to an LEA based on the following criteria:
 - (a) up to 20 points will be awarded based on the percentage of American Indian and Alaskan Native students enrolled in the program sites;
 - (b) up to 15 points will be awarded based on the educator recruiting and retention needs of the program sites;
 - (c) up to 15 points will be awarded based on the strength of the LEA's program design plan;
 - (d) up to 10 points will be awarded based on the LEA's plan to objectively evaluate the success of the LEA's program design plan; and
 - (e) up to 10 points will be awarded based on the strength of the LEA's proposed budget and how many educators the LEA plans to serve.

**KEY: Native Americans, Alaskan Natives, grant programs, teacher retention
August 7, 2017**

**Art X Sec 3
53A-31-404
53A-1-401**

R307. Environmental Quality, Air Quality.**R307-122. General Requirements: Heavy Duty Vehicle Tax Credit.****R307-122-1. Authorization and Purpose.**

(1) This rule is authorized by Sections 59-7-618 and 59-10-1033. These statutes establish criteria and definitions used to determine eligibility for an income tax credit.

(2) R307-122 establishes procedures to provide proof of a qualified purchase, in accordance with 59-7-618(6)(a) or 59-10-1033(6)(a), to the director for a qualified heavy duty vehicle for which an income tax credit is allowed under Sections 59-7-618 or 59-10-1033.

R307-122-2. Definitions.

The following additional definitions apply to R307-122.

"Heavy duty vehicle" means heavy duty vehicle as defined in Subsection 59-7-618(1)(c) and 59-10-1033(1)(c).

"Original equipment manufacturer (OEM) vehicle" means original equipment manufacturer (OEM) as defined in Subsection 19-1-402(8).

"Qualified heavy duty vehicle" means qualified heavy duty vehicle as defined in 59-7-618(1)(e) and 59-10-1033(1)(e).

"Qualified purchase" means qualified purchase as defined in 59-7-618(1)(f) and 59-10-1033(1)(f).

"Qualified taxpayer" means qualified taxpayer as defined in 59-7-618(1)(g) and 59-10-1033(1)(g).

R307-122-3. Reservation of a Qualified Heavy Duty Vehicle Tax Credit.

(1) A qualified taxpayer shall reserve a qualified heavy duty vehicle tax credit before submitting proof of qualified purchase to obtain approval from the division for the heavy duty vehicle tax credit. A qualified taxpayer shall apply to reserve the tax credit on forms provided by the division, which will include the following:

(a) the name of the qualified taxpayer and the qualified taxpayers registered name with the United States Department of Transportation (USDOT),

(b) the last four digits of the qualified taxpayer's social security number(SSN) or employer identification number (EIN),

(c) the qualified taxpayer's address, and

(d) the qualified taxpayer's USDOT number.

(2) The tax credit shall be reserved for the qualified taxpayer for up to 180 calendar days from the division's approval of the request to reserve the credit.

(3) If the qualified taxpayer does not meet all of the requirements of R307-122-4 before 181 calendar days after the division's approval of the request to reserve the tax credit, the tax credit will no longer be reserved for the qualified taxpayer.

R307-122-4. Proof of Qualified Purchase for a Qualified Heavy Duty Vehicle.

To demonstrate that a heavy duty vehicle is eligible for the tax credit, proof of qualified purchase shall be made in accordance with 59-7-605(6)(a) or 59-10-1009(6)(a), by submitting the following documents to the director:

(1)(a) a copy of the motor vehicle's window sticker, which includes its Vehicle Identification Number (VIN), or equivalent manufacturer's documentation showing that the heavy duty vehicle:

(i) is an OEM natural gas vehicle;

(ii) has a 100% electric drivetrain; or

(iii) has a hydrogen-electric drivetrain; or

(b) a signed statement by either an Automotive Service Excellence (ASE)-certified technician or Canadian Standards Association (CSA) America CNG Fuel System Inspector that includes the VIN, the technician's ASE or CSA America certification number, and states that the heavy duty vehicle:

(i) is an OEM natural gas vehicle;

(ii) has a 100% electric drivetrain; or

(iii) has a hydrogen-electric drivetrain;

(2) an original or copy of the purchase order, customer invoice, or receipt that includes the name of the qualified taxpayer seeking the credit, the name of the seller of the heavy duty vehicle, the VIN, purchase date, and price of the heavy duty vehicle;

(3) a copy of the current Utah vehicle registration in the name of the qualified taxpayer seeking the credit; and

(4) the certification required under Subsection 59-7-618(2)(b) and 59-10-1033(2)(b).

KEY: air pollution, alternative fuels, tax credits, heavy duty vehicles

August 3, 2017

19-2-104

19-1-402

59-7-618

59-10-1033

R307. Environmental Quality, Air Quality.

R307-230. NO_x Emission Limits for Natural Gas-Fired Water Heaters.

R307-230-1. Purpose.

The purpose of R307-230 is to reduce emissions of nitrogen oxides (NO_x) from natural gas-fired water heaters.

R307-230-2. Applicability.

R307-230 applies to the sale or installation of natural gas-fired water heaters on or after July 1, 2018.

R307-230-3. Emission Limits and Requirements.

(1) The State Construction and Fire Codes Act, Subsection 15A-6-102, Enacted by Chapter 236, 2017 General Session, is hereby incorporated by reference.

(2) Manufacturers shall use South Coast Air Quality Management District Method 100.1 to comply with the NO_x emission limits.

KEY: water heaters, natural gas, NO_x, air quality

August 3, 2017

19-2-101

19-2-104

19-2-107.7

R307. Environmental Quality, Air Quality.**R307-309. Nonattainment and Maintenance Areas for PM10 and PM2.5: Fugitive Emissions and Fugitive Dust.****R307-309-1. Purpose.**

This rule establishes minimum work practices and emission standards for sources of fugitive emissions and fugitive dust.

R307-309-2. Definitions.

The following additional definition applies to R307-309:

"Material" means sand, gravel, soil, minerals, and other matter that may create fugitive dust.

R307-309-3. Applicability.

(1) R307-309 applies to all new or existing sources of fugitive dust one-quarter acre or greater and any sources of fugitive emissions located in PM10 or PM2.5 nonattainment or maintenance plan areas as defined in 40 CFR 81.345 (July 1, 2011). Collectively, the PM10 and PM2.5 nonattainment and maintenance plan areas are geographically defined as all regions of Salt Lake and Davis counties; all portions of the Cache Valley; all regions in Weber County west of the Wasatch mountain range; all regions of Utah County; in Box Elder County, from the Wasatch mountain range west to the Promontory mountain range and south of Portage; and in Tooele County, from the northernmost part of the Oquirrh mountain range to the northern most part of the Stansbury mountain range and north of Route 199.

(2) Exemptions.

(a) Agriculturally derived fugitive dust sources, including agricultural or horticultural activities specified in 19-2-114 (1)-(3) are exempt from the provisions of R307-309.

(b) Any activity subject to R307-307, Road Salting and Sanding, is exempt from R307-309.

R307-309-4. Fugitive Emissions.

(1) Fugitive emissions from any source shall not exceed 15% opacity.

(2) Opacity observations of fugitive emissions from stationary sources shall be conducted in accordance with EPA Method 9.

(3) For intermittent sources and mobile sources, opacity observations shall be conducted using Method 9; however, the requirement for observations to be made at 15 second intervals over a six-minute period shall not apply. The number of observations and the time period shall be determined by the length of the intermittent or mobile source operation.

R307-309-5. General Requirements for Fugitive Dust.

(1) Except as provided in R307-309-5(3), opacity caused by fugitive dust shall not exceed:

- (a) 10% at the property boundary; and
- (b) 20% on site

(2) Any person owning or operating a new or existing source of fugitive dust one-quarter acre or greater in size shall submit a fugitive dust control plan to the director in accordance with R307-309-6.

(3) Opacity in R307-309-5(1) shall not apply when the wind speed exceeds 25 miles per hour if the owner or operator has implemented, and continues to implement, the accepted fugitive dust control plan in R307-309-6 and administers one or more of the following contingency measures:

- (a) Pre-event watering;
- (b) Hourly watering;
- (c) Additional chemical stabilization;
- (d) Cease or reduce fugitive dust producing operations to the extent practicable.

(4) Wind speed shall be measured by an anemometer.

(5) Opacity observations of fugitive dust from any source shall be measured at the densest point of the plume.

(a) For mobile sources, visible emissions shall be measured at a point not less than 1/2 vehicle length behind the vehicle and not less than 1/2 the height of the vehicle.

(b) Opacity observations of emissions from stationary sources shall be measured in accordance with EPA Method 9.

(c) For intermittent sources, opacity observations shall be conducted using Method 9; however, the requirement for observations to be made at 15 second intervals over a six-minute period shall not apply. The number of observations and the time period shall be determined by the length of the intermittent or mobile source operation.

R307-309-6. Fugitive Dust Control Plan.

(1) Any person owning or operating a new or existing source of fugitive dust, including storage, hauling or handling operations, clearing or leveling of land one-quarter acre or greater in size, earthmoving, excavation, moving trucks or construction equipment over cleared land one-quarter acre or greater in size or access haul roads, or demolition activities including razing homes, buildings or other structures, shall submit a fugitive dust control plan on a form provided by the director or another format approved by the director.

(a) A fugitive dust control plan that has been submitted to and accepted by the director prior to December 3, 2012, will fulfill the requirements of R307-309-6 for that source.

(2) Activities regulated by R307-309 shall not commence before the fugitive dust control plan is approved by the director.

(a) Successful completion of the web-based division-sponsored fugitive dust control plan tool shall constitute plan approval.

(b) Hard copy fugitive control plan submission must be reviewed and approved by the director prior to commencing activities regulated by R307-309.

(3) Sources with an existing fugitive dust control plan who make site modifications that result in emission changes shall submit an updated fugitive dust control plan.

(4) Minimum fugitive dust control plan requirements. At a minimum, a fugitive dust control plan must include the following requirements as they apply to a source:

- (a) Backfilling.
 - (i) Stabilize backfill material when not actively handling.
 - (ii) Stabilize backfill material during handling.
 - (iii) Stabilize soil at completion of backfilling activity.
 - (iv) Stabilize material while using pipe padder equipment.
- (b) Blasting.
 - (i) Stabilize surface soils where drills, support equipment and vehicles will operate.
 - (ii) Stabilize soil during blast preparation activities.
 - (iii) Stabilize soil after blasting.
- (c) Clearing.
 - (i) Stabilize surface soils where support equipment and vehicles will operate.
 - (ii) Stabilize disturbed soil immediately after clearing and grubbing activities.
 - (iii) Stabilize slopes at completion of activity.
 - (d) Clearing forms, foundations and slabs.
 - (i) Use water, sweeping and vacuum to clear.
 - (e) Crushing.
 - (i) Stabilize surface soils where support equipment and vehicles will operate.
 - (ii) Stabilize material before, during and after crushing.
 - (iii) Traffic mileage or speed controls.
 - (iv) Minimize transfer height.
 - (f) Cut and fill.
 - (i) Stabilize surface soils where support equipment and vehicles will operate.
 - (ii) Pre-water soils.
 - (iii) Stabilize soil during and after cut activities.
 - (g) Demolition-implosion.
 - (i) Stabilize surface soils where support equipment and vehicles will operate.

(i) Stabilize surface area where support equipment and vehicles will be operated.

(ii) Stabilize demolition debris immediately following blast and safety clearance.

(iii) Stabilize and clean surrounding area immediately following blast and safety clearance.

(h) Demolition-mechanical and manual.

(i) Stabilize surface areas where support equipment and vehicles will operate.

(ii) Stabilize demolition debris during handling.

(iii) Stabilize debris following demolition.

(iv) Stabilize surrounding area following demolition.

(i) Disturbed soil.

(i) Limit disturbance of soils where possible.

(ii) Stabilize and maintain stability of all disturbed soil throughout construction site.

(j) Hauling materials.

(i) Limit visible dust opacity from vehicular operations.

(ii) Stabilize materials during transport on site.

(iii) Clean wheels and undercarriage of haul trucks prior to leaving construction site.

(k) Paving subgrade preparation.

(i) Stabilize adjacent disturbed soils following paving activities by applying water, chemical stabilizer and/or synthetic cover.

(l) Sawing and cutting materials.

(i) Limit visible emissions using water or vacuum.

(m) Screening.

(i) Stabilize surface soils where support equipment and vehicles will operate.

(ii) Pre-treat material prior to screening.

(iii) Stabilize material during screening.

(iv) Stabilize material and surrounding area immediately after screening.

(v) Minimize transfer height.

(n) Staging areas.

(i) Limit visible dust opacity from vehicular operations.

(ii) Stabilize staging area soils during use.

(iii) Stabilize staging area soils at project completion.

(o) Stockpiling.

(i) Stabilize stockpile materials during and after handling.

(ii) Stabilize surface soils where support equipment and vehicles will operate.

(p) Trackout prevention and cleanup.

(i) Install and maintain trackout control devices in effective condition at all access points where paved and unpaved access or travel routes intersect.

(q) Traffic on unpaved routes and parking areas.

(i) Stabilize surface soils where support equipment and vehicles will operate.

(r) Trenching.

(i) Stabilize surface soils where trenching equipment, support equipment and vehicles will operate.

(ii) Stabilize soils after trenching.

(s) Truck loading.

(i) Empty loader bucket slowly and keep loader bucket close to the truck to minimize the drop height while dumping.

(ii) Stabilize surface soils where support equipment and vehicles will operate.

(5) The fugitive dust control plan must include contact information, site address, total area of disturbance, expected start and completion dates, identification of dust suppressant and plan certification by signature of a responsible person.

R307-309-7. Storage, Hauling and Handling of Aggregate Materials.

Any person owning, operating or maintaining a new or existing material storage, handling or hauling operation shall prevent, to the maximum extent possible, and in accordance

with R307-309-6, material from being deposited onto any paved road other than a designated deposit site. Any such person who deposits materials that may create fugitive dust on a public or private paved road shall clean the road promptly.

R307-309-8. Construction and Demolition Activities.

Any person engaging in clearing or leveling of land with an area of one-quarter acre or more, earthmoving, excavating, construction, demolition, or moving trucks or construction equipment over cleared land or access haul roads shall prevent, to the maximum extent possible, and in accordance with R307-309-6, material from being deposited onto any paved road other than a designated deposit site. Any such person who deposits materials that may create fugitive dust on a public or private paved road shall clean the road promptly.

R307-309-9. Roads.

(1) Any person responsible for construction or maintenance of any existing road or having right-of-way easement or possessing the right to use the same whose activities result in fugitive dust from the road shall minimize fugitive dust to the maximum extent possible and in accordance with R307-309-6. Any such person who deposits materials that may create fugitive dust on a public or private paved road shall clean the road promptly.

(2) Unpaved Roads. Any person responsible for construction or maintenance of any new or existing unpaved road shall prevent, to the maximum extent possible, the deposit of material from the unpaved road onto any intersecting paved road during construction or maintenance. Any person who deposits materials that may create fugitive dust on a public or private paved road shall clean the road promptly.

R307-309-10. Mining Activities.

(1) In addition to the requirements under R307-309-1 through R307-309-6, fugitive dust, construction activities, and roadways associated with mining activities are regulated under the provisions of R307-309-10.

(2) Any person who owns or operates a mining operation shall minimize fugitive dust as an integral part of site preparation, mining activities, and reclamation operations.

(3) The fugitive dust control measures to be used shall include:

(a) Periodic watering of unpaved roads or;

(b) Use of chemical stabilizers on unpaved roads or;

(c) Paving of roads.

(d) Immediate removal of coal, rock minerals, soil, and other dust-forming debris from roads and frequent scraping and compaction of unpaved roads to stabilize the road surface.

(e) Restricting the speed of vehicles in and around the mining operation,

(f) Revegetating, mulching, or otherwise stabilizing the surface of all areas adjoining roads that are a source of fugitive dust.

(g) Restricting the travel of vehicles on other than established roads.

(h) Enclosing, covering, watering, or otherwise treating loaded haul trucks and railroad cars, to minimize loss of material to wind and spillage.

(i) Substitution of conveyor systems for haul trucks and covering of conveyor systems when conveyed loads are subject to wind erosion.

(j) Minimizing the area of disturbed land.

(k) Prompt revegetation of regraded lands.

(l) Planting of special windbreak vegetation at critical points in the permit area.

(m) Control of dust from drilling, using water sprays, hoods, dust collectors or other controls approved by the director.

- (n) Restricting the areas to be blasted at any one time.
- (o) Reducing the period of time between initially disturbing the soil and revegetating or other surface stabilization.
- (p) Restricting fugitive dust at spoil and coal transfer and loading points.
- (q) Control of dust from storage piles through use of enclosures, covers, or stabilization and other equivalent methods or other techniques as determined necessary by the director and upon concurrence by EPA.

R307-309-11. Tailings Piles and Ponds.

(1) In addition to the requirements under R307-309-1 through R307-309-6, fugitive dust, construction activities, and roadways associated with tailings piles and ponds are regulated under the provisions of R307-309-11.

(2) Any person owning or operating an existing tailings operation where fugitive dust results from grading, excavating, depositing, or natural erosion or other causes in association with such operation shall take steps to minimize fugitive dust from such activities. Such controls shall include:

- (a) Watering or;
- (b) Chemical stabilization or;
- (c) Synthetic covers or;
- (d) Vegetative covers or;
- (e) Wind breaks or;
- (f) A combination of R307-309-11(2)(a)-(e);
- (g) Minimizing the area of disturbed tailings;
- (h) Restricting the speed of vehicles in and around the tailings operation; or
- (i) Other techniques which may be approvable by the director and upon concurrence by EPA.

R307-309-12. Record Keeping.

All sources subject to R307-309-5(2) and (3) shall maintain records for two years demonstrating compliance with R307-309. These records shall be available to the director upon request.

KEY: air pollution, fugitive dust

August 4, 2017

Notice of Continuation February 5, 2015

19-2-101

19-2-104

19-2-109

R315. Environmental Quality, Waste Management and Radiation Control, Waste Management.

R315-15. Standards for the Management of Used Oil.

R315-15-1. Applicability, Prohibitions, and Definitions.

1.1 APPLICABILITY

This section identifies those materials that are subject to regulation as used oil under R315-15. This section also identifies some materials that are not subject to regulation as used oil under R315-15, and indicates whether these materials may be a hazardous waste as defined under R315-261.

(a) Used oil. It is presumed that used oil is to be recycled unless a used oil handler disposes of used oil or sends used oil for disposal. Except as provided in R315-15-1.2, the requirements of R315-15 apply to used oil, and to materials identified in this section as being subject to regulation as used oil, whether or not the used oil or material exhibits any characteristics of hazardous waste identified in R315-261-20 through 24.

(b) Mixtures of used oil and hazardous waste.

(1) Listed hazardous waste.

(i) Mixtures of used oil and hazardous waste which are listed in R315-261-30 through 33 and 35 are subject to regulation as hazardous waste under R315-261 rather than as used oil under R315-15.

(ii) Rebuttable presumption for used oil. Used oil containing more than 1,000 ppm total halogens is presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste listed in R315-261-30 through 33 and 35. A person may rebut this presumption by demonstrating that the used oil does not contain hazardous waste, for example, by using an analytical method from SW-846, Edition III, Update IV to show that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in R315-261, Appendix VIII.

(A) The rebuttable presumption does not apply to metalworking oils/fluids containing chlorinated paraffins, if they are processed, through a tolling arrangement as described in R315-15-2.5(c), to reclaim metalworking oils/fluids. The presumption does apply to metalworking oils/fluids if such oils/fluids are recycled in any other manner, or disposed.

(B) The rebuttable presumption does not apply to used oils contaminated with chlorofluorocarbons (CFCs) removed from refrigeration units where the CFCs are destined for reclamation. The rebuttable presumption does apply to used oils contaminated with CFCs that have been mixed with used oil from sources other than refrigeration units.

(2) Characteristic hazardous waste. A mixture of used oil and hazardous waste that solely exhibits one or more of the hazardous waste characteristics identified in R315-261-20 through 24 and a mixtures of used oil and hazardous waste that is listed in R315-261-30 through 33 and 35 solely because it exhibits one or more of the characteristics of hazardous waste identified in R315-261-20 through 24 are subject to:

(i) Except as provided in R315-15-1(b)(2)(iii), regulation as hazardous waste under R315-260 through 266, 268, 270, and 273 rather than as used oil under R315-15, if the resultant mixture exhibits any characteristics of hazardous waste identified in R315-261-20 through 24; or

(ii) Except as specified in R315-15-1.1(b)(2)(iii), regulation as used oil under R315-15, if the resultant mixture does not exhibit any characteristics of hazardous waste identified under R315-261-20 through 24.

(iii) Regulation as used oil under R315-15, if the mixture is of used oil and a waste which is hazardous solely because it exhibits the characteristic of ignitability, e.g., mineral spirits, provided that the mixture does not exhibit the characteristic of ignitability under R315-261-21.

(3) Very small quantity generator hazardous waste. Mixtures of used oil and very small quantity generator

hazardous waste regulated under Section R315-262-14 are subject to regulation as used oil under R315-15.

(c) Materials containing or otherwise contaminated with used oil.

(1) Except as provided in R315-15-1.1(c)(2) materials containing or otherwise contaminated with used oil from which the used oil has been properly drained or removed to the extent possible such that no visible signs of free-flowing oil remain in or on the material:

(i) Are not used oil and thus not subject to R315-15, and

(ii) If applicable, are subject to the hazardous waste regulations R315-260 through 266, 268, 270, and 273, and R315-101 and 102.

(2) Materials containing or otherwise contaminated with used oil that are burned for energy recovery are subject to regulation as used oil under R315-15.

(3) Used oil drained or removed from materials containing or otherwise contaminated with used oil is subject to regulation as used oil under R315-15.

(d) Mixtures of used oil with products.

(1) Except as provided in (d)(2) mixtures of used oil and fuels or other fuel products are subject to regulation as used oil under R315-15.

(2) Mixtures of used oil and diesel fuel mixed on site by the generator of the used oil for use in the generator's own vehicles are not subject to R315-15 after the used oil and diesel fuel have been mixed. Prior to mixing, the used oil is subject to the requirements of R315-15-2.

(e) Materials derived from used oil.

(1) Materials that are reclaimed from used oil that are used beneficially and are not burned for energy recovery or used in a manner constituting disposal, e.g., re-refined lubricants, are:

(i) Not used oil and thus are not subject to R315-15, and

(ii) Not solid wastes and are thus not subject to the hazardous waste regulations of R315-260 through 266, 268, 270, and 273 as provided in R315-261-3(c)(2)(i).

(2) Materials produced from used oil that are burned for energy recovery, e.g., used oil fuels, are subject to regulation as used oil under R315-15.

(3) Except as provided in R315-15.1.1(e)(4), materials derived from used oil that are disposed of or used in a manner constituting disposal are:

(i) Not used oil and thus are not subject to R315-15, and

(ii) Are solid wastes and thus are subject to the hazardous waste regulations R315-260 through 266, 268, 270, and 273 if the materials are listed or identified as hazardous wastes.

(4) Used oil re-refining distillation bottoms that are used as feedstock to manufacture asphalt products are not subject to R315-15.

(f) Wastewater. Wastewater contaminated with de minimis quantities of used oil, the discharge of which is subject to regulation under either section 402 or section 307(b) of the Clean Water Act, including wastewaters at facilities that have eliminated the discharge of wastewater, are not subject to the requirements of Rule R315-15. For purposes of this paragraph only, "de minimis" quantities of used oils are defined as small spills, leaks, or drippings from pumps, machinery, pipes, and other similar equipment during normal operations or small amounts of oil lost to the wastewater treatment system during washing or draining operations. This exception does not apply if the used oil is discarded as a result of abnormal manufacturing operations resulting in substantial leaks, spills, or other releases, or to used oil recovered from wastewaters.

(g) Used oil introduced into crude oil pipelines or a petroleum refining facility.

(1) Used oil mixed with crude oil or natural gas liquids, e.g., in a production separator or crude oil stock tank, for insertion into a crude oil pipeline is exempt from the requirements of R315-15. The used oil is subject to the

requirements of R315-15 prior to the mixing of used oil with crude oil or natural gas liquids.

(2) Mixtures of used oil and crude oil or natural gas liquids containing less than 1% used oil that are being stored or transported to a crude oil pipeline or petroleum refining facility for insertion into the refining process at a point prior to crude distillation or catalytic cracking are exempt from the requirements of R315-15.

(3) Used oil that is inserted into the petroleum refining facility process before crude distillation or catalytic cracking without prior mixing with crude oil is exempt from the requirements of R315-15, provided that the used oil constitutes less than 1% of the crude oil feed to any petroleum refining facility process unit at any given time. Prior to insertion into the petroleum refining facility process, the used oil is subject to the requirements of R315-15.

(4) Except as provided in R315-15-1.1 (g)(5), used oil that is introduced into a petroleum refining facility process after crude distillation or catalytic cracking is exempt from the requirements of R315-15 only if the used oil meets the specification of R315-15-1.2. Prior to insertion into the petroleum refining facility process, the used oil is subject to the requirements of R315-15.

(5) Used oil that is incidentally captured by a hydrocarbon recovery system or wastewater treatment system as part of routine process operations at a petroleum refining facility and inserted into the petroleum refining facility process is exempt from the requirements of R315-15. This exemption does not extend to used oil that is intentionally introduced into a hydrocarbon recovery system, e.g., by pouring collected used oil into the waste water treatment system.

(6) Tank bottoms from stock tanks containing exempt mixtures of used oil and crude oil or natural gas liquids are exempt from the requirements of R315-15.

(h) Used oil on vessels. Used oil produced on vessels from normal shipboard operations is not subject to Rule R315-15 until it is transported ashore.

(i) Used oil containing PCBs. In addition to the requirements of R315-15, marketers and burners of used oil who market used oil containing PCBs at concentrations greater than or equal to 2 ppm are subject to the requirements found in R315-15-18 and 40 CFR 761.20(e).

(j) Inspections. Any duly authorized employee of the Director, may, at any reasonable time and upon presentation of credentials, have access to and the right to copy any records relating to used oil, and inspect, audit, or sample. Any authorized employee obtaining samples shall give to the owner, operator or agent a receipt describing the sample obtained and, if requested, a portion of each sample of waste equal in volume or weight to the portion retained. The employee may also make record of the inspection by photographic, electronic, audio, video, or any other reasonable means.

(k) Violations, Orders, and Hearings. If the Director has reason to believe a person is in violation of any provision of R315-15, procedural requirements for compliance shall follow Utah Code Annotated 19-6-721 and Utah Administrative Code R305-7.

1.2 USED OIL SPECIFICATIONS

Used oil burned for energy recovery, and any fuel produced from used oil by processing, blending, or other treatment, is subject to regulation under R315-15 until:

- (a) It has been demonstrated not to exceed any allowable levels of the constituents and properties shown in Table 1;
- (b) The person making that claim complies with R315-15-7.3, R315-15-7.4, and R315-15-7.5(b); and
- (c) The used oil is delivered to a used oil burner.

Constituent/property	Allowable level
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Flash point	100 degrees F minimum
Total halogens	4,000 ppm maximum(2)

(1) The allowable levels in Table 1 do not apply to mixtures of used oil and hazardous waste that continue to be regulated as hazardous waste. See R315-15-1.1(b).

(2) Used oil containing more than 1,000 ppm total halogens is presumed to be a hazardous waste under the rebuttable presumption described in R315-15-1.1(b)(1). Such used oil is subject to R315-266-100 through 112, rather than R315-15 when burned for energy recovery unless the presumption of mixing can be successfully rebutted.

Note: Applicable standards for the marketing and burning of used oil containing any quantifiable level (2 ppm) of PCBs are found in 40 CFR 761.20(e), 2013 edition, incorporated by reference, and R315-15-18. Prohibition of PCB oil dilution is described in 40 CFR 279.10 and 40 CFR 761.20(e).

1.3 PROHIBITIONS

Except as authorized by the Director, a person may not place, discard, or otherwise dispose of used oil in any of the following manners:

(a) Surface impoundment and waste piles. Used oil shall not be managed in surface impoundments or waste piles unless the units are subject to regulation under R315-264 or R315-265.

(b) Use as a dust suppressant, weed suppressant, or for road oiling. The use of used oil as a dust suppressant, weed suppressant, or for road oiling or other similar use is prohibited. Any disposal of used oil on the ground is prohibited under Utah Code Annotated 19-6-706(1)(a)(iii).

(c) A person may not mix or commingle used oil with the following substances, except as incidental to the normal course of processing, mechanical, or industrial operations:

(1) Solid waste that is to be disposed of in any solid waste treatment, storage, or disposal facility, except as authorized by the Director; or

(2) Any hazardous waste so the resulting mixture may not be recycled or used for other beneficial purpose as authorized under R315-15.

(d) Used oil shall not be disposed in a solid waste treatment, storage, or disposal facility, except for the disposal of hazardous used oil as authorized under R315-261.

(e) Used oil shall not be disposed in sewers, drainage systems, septic tanks, surface or ground waters, watercourses, or any body of water.

1.4 BURNING IN PARTICULAR UNITS

Burning in particular units. Off-specification used oil fuel may be burned for energy recovery only in the devices described in R315-15-6.2(a).

1.5 DISPOSAL OF DE MINIMIS USED OIL

(a) R315-15-1.3 does not apply to release of de minimis quantities of used oil identified under Utah Code Annotated 19-6-706(4)(a) except for the requirements of 19-6-706(i) and (ii).

(b) A person may dispose of an item or substance that contains de minimis amounts of oil in disposal facilities in accordance with Utah Code Annotated 19-6-706 (2) (a) if:

(1) To the extent that all oil has been reasonably removed from the item or substance; and

(2) No free flowing oil remains in the item or substance.

1.6 USED OIL FILTERS

(a) Disposal of Used Oil Filters. A person may dispose of a nonterne plated used oil filter as a non-hazardous solid waste when that filter is gravity hot-drained by one of the methods described in R315-15-1.6(b) and is not mixed with hazardous waste defined in R315-261.

(b) "Gravity hot-drained" means drained for not less than 12 hours near operating temperature but above 60 degrees Fahrenheit. A nonterne used oil filter is a container of used oil and is subject to R315-15 until it is gravity hot-drained by one

TABLE 1
USED OIL NOT EXCEEDING ANY ALLOWABLE LEVEL IS NOT
SUBJECT TO R315-15-6 WHEN BURNED FOR ENERGY RECOVERY(1)

of the following methods:

- (1) puncturing the filter anti-drain back valve or the filter dome end and gravity hot-draining;
- (2) gravity hot-draining and crushing;
- (3) dismantling and gravity hot-draining; or
- (4) any other equivalent gravity hot-draining method authorized by the Director that will remove used oil from the filter at least as effectively as the methods listed in R315-15-1.6(b)(1) through (3).

1.7 DEFINITIONS

(a) Definitions of terms used in R315-15 are found in: R315-15-1.7(b) through (h) and R315-260.

(b) The term "de minimis quantities of used oil" defined in Utah Code Annotated 19-6-706(4)(b), and 19-6-708(3)(a) means small spills, leaks, or drippings from pumps, machinery, pipes, and other similar equipment during normal operations and does not apply to used oil discarded as a result of abnormal operations resulting in substantial leaks, spills, or other releases. Nor does it apply to accumulations of quantities of used oil that pose a potential threat to human health or the environment.

(c) "Financial responsibility" means the mechanism by which a person who has a financial obligation satisfies that obligation.

(d) "Used oil" means any oil, refined from crude oil or synthetic oil, that has been used and as a result of that use is contaminated by physical or chemical impurities. Used oil includes engine oil, transmission fluid, compressor oils, metalworking oils, hydraulic oil, brake fluid, oils used as buoyants, lubricating greases, electrical insulating, and dielectric oils.

(e) "Polychlorinated biphenyl (PCB)" means any chemical substance that is limited to the biphenyl molecule that has been chlorinated to varying degrees or any combination of substances which contains such substance.

(f) "On-specification used oil" means used oil that does not exceed levels of constituents and properties specified in R315-15-1.2.

(g) "Off-specification used oil" means used oil that exceeds levels of constituents and properties specified in R315-15-1.2.

(h) "Parts per million (ppm)" means a weight-per-weight ratio used to describe concentrations. Parts per million (ppm) is the number of units of mass of a contaminant per million units of total mass (e.g., micrograms per gram).

1.8 LABORATORY ANALYSES

Laboratory analyses used to satisfy the requirements of R315-15 shall be performed by a laboratory that holds a current Utah Certification for environmental laboratories issued by the Utah Department of Health, Laboratory Improvement under R444-14 Utah Administrative Code. The laboratory shall be certified for the method(s) and analyte(s) applied to generate the environmental data.

R315-15-2. Standards for Used Oil Generators.

2.1 APPLICABILITY

(a) General. Except as provided in paragraphs (a)(1) through (a)(4) of this section, R315-15-2 applies to all used oil generators. A used oil generator is any person, by site, whose act or process produces used oil or whose act first causes used oil to become subject to regulation.

(1) Household "do-it-yourselfer" used oil generators. Household "do-it-yourselfer" used oil generators are not subject to regulation under R315-15, except for the prohibitions of R315-15-1.3 and cleanup requirements of R315-15-9.

(2) Vessels. Vessels at sea or at port are not subject to R315-15-2. For purposes of R315-15-2, used oil produced on vessels from normal shipboard operations is considered to be generated at the time it is transported ashore. The owner or operator of the vessel and the person(s) removing or accepting

used oil from the vessel are co-generators of the used oil and are both responsible for managing the used oil in compliance with R315-15-2 once the used oil is transported ashore. The co-generators may decide among themselves which party will fulfill the requirements of R315-15-2.

(3) Diesel fuel. Mixtures of used oil and diesel fuel mixed by the generator of the used oil for use in the generator's own vehicles are not subject to R315-15 once the used oil and diesel fuel have been mixed. Prior to mixing, the used oil fuel is subject to the requirements of R315-15-2.

(4) Farmers. Farmers who generate an average of 25 gallons per month or less of used oil from vehicles or machinery used on the farm in a calendar year are not subject to the requirements of R315-15, except for the prohibitions of R315-15-1.3 and cleanup requirements of R315-15-9.

(b) Other applicable provisions. Used oil generators who conduct the following activities are subject to the requirements of other applicable provisions of R315-15 as indicated in R315-15-2.1(b)(1) through (5):

(1) Generators who transport used oil, except under the self-transport provisions of R315-15-2.5(a) and (b), shall also comply with R315-15-4.

(2)(i) Except as provided in R315-15-2.1(b)(2)(ii), generators who process or re-refine used oil must also comply with R315-15-5.

(ii) Generators who perform the following activities are not processors, provided that the used oil is generated onsite and is not being sent offsite to a burner of on- or off-specification used oil fuel.

(A) Filtering, cleaning, or otherwise reconditioning used oil before returning it for reuse by the generator;

(B) Separating used oil from wastewater generated onsite to make the wastewater acceptable for discharge or reuse in accordance with section 402 or section 307(b) of the Clean Water Act or other applicable Federal or state regulations governing the management or discharge of wastewater;

(C) Using oil mist collectors to remove small droplets of used oil from in-plant air to make plant air suitable for continued recirculation;

(D) Draining or otherwise removing used oil from materials containing or otherwise contaminated with used oil in order to remove excessive used oil to the extent possible in accordance with R315-15-1.1(c); or

(E) Filtering, separating or otherwise reconditioning used oil before burning it in a space heater in accordance with R315-15-2.4.

(3) Generators who burn off-specification used oil for energy recovery, shall also comply with R315-15-6.

(4) Generators who direct shipments of off-specification used oil from their facility to a used oil burner or first certify that used oil that is to be burned for energy recovery meets the used oil fuel specifications set forth in R315-15-1.2 shall also comply with R315-15-7.

(5) Generators who dispose of used oil shall also comply with R315-15-8.

2.2 HAZARDOUS WASTE MIXING

(a) Mixtures of used oil and hazardous waste shall be managed in accordance with R315-15-1.1(b).

(b) The rebuttable presumption for used oil found in R315-15-1.1(b)(1)(ii) applies to used oil managed by generators. Under this rebuttable presumption, used oil containing greater than 1,000 ppm total halogens is presumed to be a hazardous waste and thus shall be managed as hazardous waste and not as used oil unless the presumption is rebutted. However, the rebuttable presumption does not apply to certain metalworking oil or fluids containing chlorinated paraffins, if they are processed through a tolling agreement to reclaim the metalworking oils or fluids, and certain used oils removed from refrigeration units described in R315-15-1.1(b)(1)(ii)(B).

2.3 USED OIL STORAGE

Used oil generators are subject to all applicable Spill Prevention, Control and Countermeasures, 40 CFR 112, in addition to the requirements of R315-15-2. Used oil generators are also subject to the standards and requirements of R311-200 through R311-209, Underground Storage Tanks, for used oil stored in underground tanks whether or not the used oil exhibits any characteristics of hazardous waste. In addition, used oil generators are subject to the requirements of R315-15-2.

(a) Storage units. Used oil generators shall not store used oil in units other than tanks, containers, or units subject to regulation under R315-264 and R315-265.

(b) Condition of units. Containers and aboveground tanks used to store used oil at generator facilities shall be:

(1) In good condition, with no severe rusting, apparent structural defects or deterioration; and

(2) Not leaking.

(3) Tanks and containers for storage of used oil must be closed during storage except when adding or removing used oil.

(4) Tanks and containers storage areas shall be managed to prevent releases of used oil to the environment.

(c) Labels.

(1) Containers and aboveground tanks used to store used oil at generator facilities shall be labeled or marked clearly with the words "Used Oil".

(2) Fill pipes used to transfer used oil into underground storage tanks at generator facilities shall be labeled or marked clearly with the words "Used Oil."

(d) Response to releases. Upon detection of a release of used oil to the environment not subject to the requirements of Section R311-202-1, which incorporates by reference 40 CFR 280, Subpart F, a generator shall comply with Section R315-15-9.

2.4 ON-SITE BURNING

On-site burners shall comply with R315-15-6 and, if applicable, shall obtain an Air Quality permit.

(a) Generators may burn used oil in used oil-fired space heaters without a used oil permit provided that:

(1) The heater burns only used oil that the owner or operator generates;

(2) The heater is designed to have a maximum capacity of not more than 0.5 million Btu per hour;

(3) The combustion gases from the heater are vented to the outside ambient air;

(4) The generator has knowledge that the used oil has not been mixed with hazardous waste; and

(5) The used oil is being legitimately burned to utilize its energy content.

(b) Used Oil Collection Center(UOCC). If it is registered as a Used Oil Collection Center as authorized in R315-15-3, the UOCC may burn used oil in used oil fired space heaters without a used oil permit under the provision described in R315-15-2.4(a) provided that the used oil is received from household do-it-yourselfer generators or farmers described in R315-15-2.1(a)(4) or the used oil is received from other generators and has been certified to meet the used oil fuel specifications of R315-15-1.2 by a registered used oil marketer in accordance with R315-15-7.

2.5 OFF-SITE SHIPMENTS

Except as provided in R315-15-2.5(a) through (c), a generator shall ensure that its used oil is transported only by a transporter who has obtained a Utah used oil transporter permit and has a current used oil handler certificate issued by the Director and an EPA identification number.

(a) Self-transportation of small amounts to approved collection centers. A generators may transport, without an EPA identification number, a used oil transporter permit, or a current used oil handler certificate, used oil that is generated at the generator's site and used oil collected from household do-it-

yourselfers to a used oil collection center provided that:

(1) The generator transports the used oil in a vehicle owned by the generator or owned by an employee of the generator;

(2) The generator transports no more than 55 gallons of used oil at any time; and

(3) The generator transports the used oil to a used oil collection center that is registered or permitted to manage used oil.

(b) Self-transportation of small amounts to aggregation points owned by the generator. A generator may transport, without an EPA identification number, a used oil transporter permit, or used oil handler certificate, used oil that is generated at the generator's site to an aggregation point provided that:

(1) The generator transports the used oil in a vehicle owned by the generator or owned by an employee of the generator;

(2) The generator transports no more than 55 gallons of used oil at any time; and

(3) The generator transports the used oil to an aggregation point that is owned, operated, or both by the same generator.

(c) Tolling arrangements. Used oil generators may arrange for used oil to be transported by a transporter without an EPA identification number, a used oil transporter permit, or a current used oil handler certificate if the used oil is reclaimed under a contractual agreement under which reclaimed oil is returned by the processor/re-refiner to the generator for use as a lubricant, cutting oil, or coolant. The contract, known as a "tolling arrangement," shall indicate:

(1) The type of used oil and the frequency of shipments;

(2) That the vehicle used to transport the used oil to the processing/re-refining facility and to deliver recycled used oil back to the generator is owned and operated by the used oil processor/re-refiner; and

(3) That reclaimed oil will be returned to the generator.

R315-15-3. Standards for Used Oil Collection Centers and Aggregation Points.

3.1 DO-IT-YOURSELFER USED OIL COLLECTION CENTERS TYPES A and B

(a) Applicability. R315-15-3.1 applies to owners or operators of Type A and B used oil collection centers:

(1) Type A used oil collection center. Type A and B is any site or facility that accepts/aggregates and stores used oil collected only from household do-it-yourselfers (DIYers) in quantities not exceeding five gallons per visit.

(2) Type B used oil collection center. Type B used oil collection center is any site or facility that accepts/aggregates and stores used oil collected from farmers as required by R315-15-2.1(a)(4) in quantities not exceeding 55 gallons per visit from farmers and not exceeding five gallons per visit from household do-it-yourselfers.

(b) Type A or B used oil collection center requirements. Owners or operators of Type A or B used oil collection centers shall:

(1) Comply with the generator standards in R315-15-2.

(2) Be registered with the Division of Waste Management and Radiation Control to manage used oil as a used oil collection center as required by R315-15-13.1; and

(3) Keep records of used oil collected by the collection center. This does not include used oil generated on site from maintenance and servicing operations. These records shall be kept for a minimum of three years and shall contain the following information:

(i) Name and address of generator or if unavailable, a written description of how the used oil was received;

(ii) Quantity of used oil received;

(iii) Date the used oil is received; and

(iv) Volume of used oil picked up by a permitted

transporter and the transporter's name and EPA identification number.

(4) A Type A or B used oil collection center shall not accept used oil from generators other than those specified in R315-15-3.1(1) and (2).

(c) Reimbursements. Type A or B used oil collection centers are classified as DIYer used oil collection centers and may be reimbursed as described in R315-15-14.

3.2 USED OIL COLLECTION CENTERS - TYPES C AND D

(a) Applicability. R315-15-3.2 applies to owners or operators of Type C and D used oil collection centers.

(1) Type C used oil collection center is any site or facility that accepts/aggregates and stores used oil collected from used oil generators regulated under R315-15-2 who bring used oil to the collection center in shipments of no more than 55 gallons under the provisions of R315-15-2.5(a). Type C used oil collection centers may also accept used oil from household do-it-yourselfers and farmers described in R315-15-2.1(a)(4).

(2) A Type D used oil collection center is any site or facility that only accepts/aggregates and stores used oil collected from used oil generators regulated under R315-15-2 who bring used oil to the collection center in shipments of no more than 55 gallons under the provisions of R315-15-2.5(a). Type D used oil collection centers do not qualify for reimbursement.

(b) Used oil collection center Type C and D requirements. Owners or operators of Types C and D used oil collection centers shall:

(1) Comply with the generator standards in R315-15-2;

(2) Be registered with the Division of Waste Management and Radiation Control to manage used oil; and

(3) Keep records of used oil received from off-site sources and transported from the collection center. This does not include used oil generated onsite from maintenance and servicing operations. These records shall be kept for a minimum of three years and shall contain the following information:

(i) Name and address of generator or, if unavailable, a written description of how the used oil was received;

(ii) Quantity of used oil received;

(iii) Date the used oil is received; and

(iv) Volumes of used oil collected by a permitted transporter and the transporter's name and federal EPA identification number.

(c) Reimbursements. Type C used oil collection centers may be reimbursed as described in R315-15-14 for household do-it-yourselfer and used oil generated by farmers as defined in R315-15-3.1. Other generator used oil does not meet the reimbursement criteria as do-it-yourselfer used oil and does not qualify for reimbursement.

3.3 USED OIL AGGREGATION POINTS OWNED BY THE GENERATOR

(a) Applicability. R315-15-3.3 applies to owners or operators of all used oil aggregation points. A used oil aggregation point is any site or facility that accepts, aggregates, or stores used oil collected only from other used oil generation sites owned or operated by the owner or operator of the aggregation point, from which used oil is transported to the aggregation point in shipments of 55 gallons or less under the provisions of R315-15-2.5(b). Used oil aggregation points may also accept used oil from household do-it-yourselfers as long as they register as do-it-yourselfer collection centers, as described in R315-15-13.1, and comply with do-it-yourselfer collection center standards in R315-15-3.1. Used oil aggregation points that accept used oil from other generators shall register as collection centers, as described in R315-15-13.2, and comply with collection center standards in R315-15-3.2.

(b) Used oil aggregation point requirements. Owners or operators of all used oil aggregation points shall comply with the generator standards in R315-15-2.

R315-15-4. Standards for Used Oil Transporter and Transfer Facilities.

4.1 APPLICABILITY

(a) General. R315-15-4 applies to all used oil transporters, except as provided in R315-15-4.1(a)(1) through (4). Persons who transport used oil, persons who collect used oil from more than one generator and transport the collected used oil, and owners and operators of used oil transfer facilities are used oil transporters. Except as provided by R315-15-13.4(f), used oil transporters or operators of used oil transfer facilities shall obtain a permit from the Director prior to accepting any used oil for transportation or transfer. The application for a permit shall include the information required by R315-15-13.4. Used oil transporters and operators of used oil transfer facilities shall obtain and maintain a used oil handler certificate in accordance with R315-15-13.8.

(1) R315-15-4 does not apply to on-site transportation.

(2) R315-15-4 does not apply to generators who transport shipments of used oil totaling 55 gallons or less from the generator to a used oil collection center as specified in Subsection R315-15-2.5(a).

(3) R315-15-4 does not apply to generators who transport shipments of used oil totaling 55 gallons or less from the generator to a used oil aggregation point owned or operated by the same generator as specified in R315-15-2.5(b).

(4) R315-15-4 does not apply to transportation of used oil from household do-it-yourselfers to a regulated used oil generator, collection center, aggregation point, processor/refiner, or burner subject to the requirements of R315-15. Except as provided in R315-15-4.1(a)(1) through (a)(3), R315-15-4 does, apply to transportation of collected household do-it-yourselfer used oil from regulated used oil generators, collection centers, aggregation points, or other facilities where household do-it-yourselfer used oil is collected.

(b) Imports and exports. Transporters are subject to the requirements of R315-15-4 from the time the used oil enters and until the time it exits Utah.

(c) Vehicles used to transport hazardous waste. Unless vehicles previously used to transport hazardous waste are emptied as described in R315-261-7 prior to transporting used oil, the used oil is considered to have been mixed with the hazardous waste and shall be managed as hazardous waste unless, under the provisions of R315-15-1.1(b), the hazardous waste/used oil mixture is determined not to be hazardous waste.

(d) Vehicles used to transport PCB-contaminated material. Unless vehicles previously used to transport PCB-contaminated material are decontaminated as described in 40 CFR 761 Subpart S, (2013 edition, incorporated by reference), prior to transporting used oil, the used oil is considered to have been mixed with PCB-contaminated material and shall be managed as PCB-contaminated material in accordance with R315-15-18 and 40 CFR 761.

(e) Tanks, containers, and piping that contained PCB-contaminated material. Unless tanks, containers, and piping that previously contained PCB-contaminated material are decontaminated as described in 40 CFR 761 Subpart S prior to transferring used oil, the used oil is considered to have been mixed with PCB-contaminated material in accordance with R315-15-18 and 40 CFR 761 Subpart S.

(f) Other applicable provisions. Used oil transporters who conduct the following activities are also subject to other applicable provisions of R315-15 as indicated in R315-15-4.1(f)(1) through (5):

(1) Transporters who generate used oil shall also comply with R315-15-2;

(2) Transporters who process or re-refine used oil, except as provided in R315-15-4.2, shall also comply with R315-15-5;

(3) Transporters who burn off-specification used oil for energy recovery shall also comply with R315-15-6;

(4) Transporters who direct shipments of off-specification used oil from their facility to a used oil burner or first claim that used oil that is to be burned for energy recovery meets the used oil fuel specifications set forth in R315-15-1.2 shall also comply with R315-15-7; and

(5) Transporters who dispose of used oil shall also comply with R315-15-8.

4.2 RESTRICTIONS ON TRANSPORTERS WHO ARE NOT ALSO PROCESSORS OR RE-REFINERS

(a) Used oil transporters may consolidate or aggregate loads of used oil for purposes of transportation. However, except as provided in R315-15-4.2(b), used oil transporters may not process used oil unless they also comply with the requirements for processors/re-refiners in R315-15-5.

(b) Transporters may conduct incidental processing operations that occur in the normal course of used oil transportation, e.g., settling and water separation, but that are not designed to produce, or make more amenable for production of, used oil derived products unless they also comply with the processor/re-refiner requirements in R315-15-5.

(c) Transporters of used oil that is removed from oil-bearing electrical transformers and turbines and filtered by the transporter or at a transfer facility prior to being returned to its original use are not subject to the processor/re-refiner requirements in R315-15-5.

4.3 NOTIFICATION

(a) Identification numbers. Used oil transporters who have not previously complied with the notification requirements of RCRA section 3010 shall comply with these requirements and obtain an EPA identification number.

(b) Mechanics of notification. A used oil transporter who has not received an EPA identification number may obtain one by notifying the Director of his used oil activity by submitting either:

(1) A completed EPA Form 8700-12 or

(2) A letter to the Division requesting an EPA identification number. The letter shall include the following information:

(i) Transporter company name;

(ii) Owner of the transporter company;

(iii) Mailing address for the transporter;

(iv) Name and telephone number for the transporter point of contact;

(v) Type of transport activity, i.e., transport only, transport and transfer facility, transfer facility only;

(vi) Location of all transfer facilities at which used oil is stored; and

(vii) Name and telephone number for a contact at each transfer facility.

4.4 USED OIL TRANSPORTATION

(a) Deliveries. A used oil transporter shall deliver all used oil received to:

(1) Another used oil transporter, provided that the transporter has obtained an EPA identification number, transporter permit, and current used oil handler certificate issued by the Director;

(2) A used oil processing/re-refining facility that has obtained an EPA identification number, processing/refining permit, and current used oil handler certificate issued by the Director;

(3) An off-specification used oil burner facility that has obtained an EPA identification number, off-specification used oil burner permit, and current used oil handler certificate issued by the Director;

(4) A used oil transfer facility that has obtained an EPA identification number, transfer facility permit, and current used oil handler certificate issued by the Director; or

(5) An on-specification used oil burner facility.

(b) DOT Requirements. Used oil transporters shall

comply with all applicable requirements under the U.S. Department of Transportation regulations in 49 CFR 171 through 180. Persons transporting used oil that meets the definition of a hazardous material in 49 CFR 171.8 shall comply with all applicable regulations in 49 CFR 171 through 180.

(c) Used oil discharges. In the event of a used oil discharge, a transporter shall comply with R315-15-9.

(d) The words "Used Oil" shall be clearly visible, in letters at least two inches high, on all vehicles transporting bulk used oil.

4.5 REBUTTABLE PRESUMPTION FOR USED OIL

(a) To ensure that used oil is not a hazardous waste under the rebuttable presumption of R315-15-1.1(b)(1)(ii), the used oil transporter shall determine whether the total halogen content of used oil being transported or stored at a transfer facility is below 1,000 ppm.

(b) The transporter shall make this determination by:

(1) Testing the used oil; or

(2) Applying and documenting generator knowledge of the halogen content of the used oil in light of the materials or processes used.

(c) If the used oil contains greater than or equal to 1,000 ppm total halogens, it is presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste listed in R315-261-30 through 33 and 35. The owner or operator may rebut the presumption by demonstrating that the used oil does not contain hazardous waste, for example, by using an analytical method from SW-846, Edition III, update IV to show that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in R315-261 Appendix VIII.

(1) The rebuttable presumption does not apply to metalworking oils/fluids containing chlorinated paraffins, if they are processed, through a tolling arrangement as described in R315-15-2.5(c), to reclaim metalworking oils/fluids. The presumption does apply to metalworking oils/fluids if such oils/fluids are recycled in any other manner, or disposed.

(2) The rebuttable presumption does not apply to used oils contaminated with chlorofluorocarbons (CFCs) removed from refrigeration units if the CFCs are destined for reclamation. The rebuttable presumption does apply to used oils contaminated with CFCs that have been mixed with used oil from sources other than refrigeration units.

(d) Record retention. Records of analyses conducted or information used to comply with R315-15-4.5(a), (b), and (c) shall be maintained by the transporter for at least three years.

4.6 USED OIL STORAGE AT TRANSFER FACILITIES

Used oil transporters are subject to all applicable Spill Prevention, Control and Countermeasures, in accordance with 40 CFR 112, in addition to the requirements of R315-15-4. Used oil transporters are also subject to the standards of R311, which incorporates by reference 40 CFR 280, for used oil stored in underground tanks whether or not the used oil exhibits any characteristics of hazardous waste, in addition to the requirements of R315-15-4.

(a) Applicability. R315-15-4 applies to used oil transfer facilities. Used oil transfer facilities are transportation-related facilities including loading docks, parking areas, storage areas, and other areas where shipments of used oil are held for more than 24 hours during the normal course of transportation and not longer than 35 days. Transfer facilities that store used oil for more than 35 days are subject to the processor/re-refiner requirements found in R315-15-5.

(b) Storage units. Owners or operators of used oil transfer facilities may not store used oil in units other than tanks, containers, or units subject to regulation under R315-264 or R315-265.

(c) Condition of units. Containers and aboveground tanks and tank systems, including their associated pipes and valves,

used to store used oil at transfer facilities shall be:

(1) In good condition, with no severe rusting, apparent structural defects, or deterioration; and

(2) Not leaking.

(3) Tanks and containers for storage of used oil must be closed during storage except when adding or removing used oil.

(4) Tanks and container storage areas shall have a containment system that is designed and operated in accordance with R315-264-170 through 178.

(d) Secondary containment. Containers and aboveground tanks used to store used oil at transfer facilities, including their pipe connections and valves, shall be equipped with a secondary containment system.

(1) The secondary containment system shall consist of:

(i) Dikes, berms, or retaining walls; and

(ii) A floor. The floor shall cover the entire area within the dikes, berms, or retaining walls except areas where existing portions of existing aboveground tanks meet the ground.

(iii) An equivalent secondary containment system approved by the Director.

(2) The entire containment system, including walls and floors, shall be sufficiently impervious to used oil to prevent any used oil released into the containment system from migrating out of the system to the soil, groundwater, or surface water.

(3) The secondary system shall be of sufficient extent to prevent any used oil releases from tanks and containers in R315-15-4.6(b), from migrating out of the system to the soil, groundwater, or surface water.

(4) Water, used oil, or other liquids shall be removed from secondary containment, including sumps, within 24 hours of discovery.

(5) Used oil shall not be stored or allowed to accumulate in sumps and similar water containment structures at the facility. Any used oil in such sumps beyond a surface sheen shall be removed within 24 hours of discovery.

(6) Transporters loading to or from rail tanker cars shall also comply with secondary containment requirements of R315-15-4.10.

(e) Labels.

(1) Containers and aboveground tanks used to store used oil at transfer facilities shall be labeled or marked clearly with the words "Used Oil."

(2) Fill pipes used to transfer used oil into underground storage tanks at transfer facilities shall be labeled or marked clearly with the words "Used Oil."

(f) Response to releases. Upon detection of a release of used oil to the environment not subject to the requirements of R311-202-1, which incorporates by reference 40 CFR 280, Subpart F, the owner/operator of a transfer facility shall comply with R315-15-9.

4.7 TRACKING

(a) Acceptance. Used oil transporters and transfer facilities shall keep a written record of each used oil shipment accepted for transport. These records shall take the form of a log, invoice, manifest, bill of lading, or other shipping documents. Written records for each shipment shall include:

(1) The name and address of the generator, transporter, transfer facility, burner, or processor/re-refiner who provided the used oil for transport;

(2) The EPA identification number, if applicable, of the generator, transporter, or processor/re-refiner who provided the used oil for transport;

(3) Documentation demonstrating the transporter has met the halogen determination requirements of R315-15-4.5 and, where applicable, the PCB testing requirements of R315-15-18;

(4) The quantity of used oil accepted;

(5) The date of acceptance; and

(6)(i) Except as provided in R315-15-4.7(a)(6)(ii), the signature, dated upon receipt of the used oil, of a representative

of the generator, transporter, transfer facility, burner, or processor/re-refiner who provided the used oil for transport.

(ii) Intermediate rail transporters are not required to sign the record of acceptance.

(b) Deliveries. Used oil transporters and transfer facilities shall keep a written record of each shipment of used oil that is delivered to another used oil transporter, a transfer facility, burner, processor/re-refiner, or disposal facility. Records of each delivery shall include:

(1) The name and address of the receiving facility or transporter;

(2) The EPA identification number of the receiving facility or transporter;

(3) The quantity of used oil delivered;

(4) The date of delivery; and

(5)(i) Except as provided in R315-15-4.7(a)(6)(ii), the signature, dated upon receipt of the used oil, of a representative of the receiving facility or transporter.

(ii) Intermediate rail transporters are not required to sign the record of delivery.

(c) Exports of used oil. Used oil transporters shall maintain the records described in R315-15-4.7(b)(1) through (b)(4) for each shipment of used oil exported outside of Utah.

(d) Record retention. The records described in R315-15-4.7(a), (b), and (c) shall be maintained for at least three years at a specified facility approved by the Director.

(e) Reporting. Used oil transporter and transfer facilities shall report annually by March 1 to the Director. The report shall be consistent with the requirements of R315-15-13.4(d).

4.8 MANAGEMENT OF RESIDUES

Transporters who generate residues from the storage or transport of used oil shall manage the residues as specified in R315-15-1.1(e).

4.9 ACCEPTANCE OF OFF-SITE USED OIL

Used oil transporters and transfer facilities accepting used oil from off-site shall ensure that the transporters delivering the used oil have obtained a current used oil transporter permit and an EPA identification number.

4.10 TRANSFER OF USED OIL TO OR FROM RAIL CARS

(a) Spill prevention. Facilities or transporters loading or unloading used oil from rail cars shall:

(1) Use spill pans beneath rail cars being loaded or unloaded with used oil. These spill pans shall be placed inside and outside of the track below the rail car loading port in such a way as to capture releases that might occur during the loading and unloading operations;

(2) Securely park used oil transportation trucks on a loading pad during the loading and unloading of used oil between those trucks and the rail tanker car. The loading pad shall be constructed of asphalt or concrete, or an equivalent system approved by the Director, and shall be sloped or bermed in such a way as to contain used oil spills;

(3) Be loaded and unloaded through a valve or port located on top of the rail car unless otherwise approved by the Director; and

(4) Transporter personnel shall actively monitor the transfer during the entire loading and unloading process.

(b) Storage at rail loading and unloading facilities. If, during the normal course of transportation, used oil remains at the loading and unloading facility for more than 24 hours but less than 35 days, the facility is subject to regulation as a used oil transfer facility as defined in R315-15-4.6 and is required to apply for a permit as a used oil transfer facility as defined in R315-15-13.4. A transfer facility that stores used oil for more than 35 days is subject to the processor/re-refiner requirements as defined in R315-15-5.

R315-15-5. Standards for Used Oil Processors and Re-

Refiners.**5.1 APPLICABILITY**

(a) The requirements of R315-15-5 apply to owners and operators of facilities that process used oil. Processing means chemical or physical operations designed to produce from used oil, or to make used oil more amenable for production of, fuel oils, lubricants, or other used oil-derived products. Processing includes: blending used oil with virgin petroleum products, blending used oils to meet the fuel specification, filtration, simple distillation, chemical or physical separation and re-refining. The requirements of R315-15-5 do not apply to:

(1) Transporters that conduct incidental processing operations that occur during the normal course of transportation as provided in R315-15-4.2; or

(2) Burners that conduct incidental processing operations that occur during the normal course of used oil management prior to burning as provided in R315-15-6.2(b).

(b) Other applicable provisions. Used oil processors/re-refiners who conduct the following activities are also subject to the requirements of other applicable provisions of R315-15 as indicated in R315-15-5.1(b)(1) through (b)(7).

(1) Processors/re-refiners who generate used oil shall also comply with R315-15-2.

(2) Processors/re-refiners who transport used oil shall also comply with R315-15-4.

(3) Processor/re-refiners who burn off-specification used oil for energy recovery shall also comply with R315-15-6 except where:

(i) The used oil is only burned in an on-site space heater that meets the requirements of R315-15-2.4; or

(ii) The used oil is only burned for purposes of processing used oil, which is considered burning incidentally to used oil processing.

(4) Processors/re-refiners who direct shipments of off-specification used oil from their facility to a used oil burner or first claim that used oil that is to be burned for energy recovery meets the used oil fuel specifications set forth in R315-15-1.2 shall also comply with R315-15-7.

(5) Processors/re-refiners who dispose of used oil shall also comply with R315-15-8.

(6) Tanks, containers, and piping that contained hazardous waste. Unless tanks, containers, and piping that previously contained hazardous waste are emptied as described in R315-2-7 prior to storing or transferring used oil, the used oil is considered to have been mixed with the hazardous waste and shall be managed as hazardous waste unless, under the provisions of R315-15-1.1(b), the hazardous waste and used oil mixture is determined not to be hazardous waste.

(7) Tanks, containers, and piping that previously contained PCB-contaminated material. Unless tanks, containers, and piping that previously contained PCB-contaminated material are decontaminated as described in 40 CFR 761 Subpart S prior to storing or transferring of used oil, the used oil is considered to have been mixed with the PCB-contaminated material and shall be managed in accordance with R315-15-18 and 40 CFR 761 Subpart S, as applicable.

(c) Processors/re-refiners shall obtain a permit from the Director prior to processing or re-refining used oil. An application for a permit shall contain the information required by R315-15-13.5.

5.2 NOTIFICATION

(a) Identification numbers. Used oil processors/re-refiners who have not previously complied with the notification requirements of RCRA section 3010 shall comply with these requirements and obtain an EPA identification number.

(b) Mechanics of notification. A used oil processor or re-refiner who has not received an EPA identification number may obtain one by notifying the Director of their used oil activity by submitting either:

(1) A completed EPA Form 8700-12; or

(2) A letter to the Division requesting an EPA identification number. The letter shall include the following information:

(i) Processor or re-refiner company name;

(ii) Owner of the processor or re-refiner company;

(iii) Mailing address for the processor or re-refiner;

(iv) Name and telephone number for the processor or re-refiner point of contact;

(v) Type of used oil activity, i.e., process only, process and re-refine;

(vi) Location of the processor or re-refiner facility.

5.3 GENERAL FACILITY STANDARDS

(a) Preparedness and prevention. Owners and operators of used oil processor/re-refiner facilities shall comply with the following requirements:

(1) Maintenance and operation of facility. Facilities shall be maintained and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of used oil to air, soil, surface water, or groundwater that could threaten human health or the environment.

(2) Required equipment. All facilities shall be equipped with the following:

(i) An internal communications or alarm system capable of providing immediate emergency instruction, voice and signal, to facility personnel;

(ii) A device, such as a telephone, immediately available at the scene of operations, or a hand-held two-way radio, capable of summoning emergency assistance from local police departments, fire departments, or State or local emergency response teams;

(iii) Portable fire extinguishers, fire control equipment, including special extinguishing equipment, such as that using foam, inert gas, or dry chemicals, spill control equipment, and decontamination equipment; and

(iv) Water at adequate volume and pressure to supply water hose streams, or foam producing equipment, or automatic sprinklers, or water spray systems.

(3) Testing and maintenance of equipment. All facility communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, where required, shall be tested and maintained as necessary to assure its proper operation in time of emergency. Records of such testing and maintenance shall be kept for three years.

(4) Access to communications or alarm system.

(i) Whenever used oil is being poured, mixed, spread, or otherwise handled, all personnel involved in the operation shall have immediate access to an internal alarm or emergency communication device, either directly or through visual or voice contact with another employee, unless such a device is not required in R315-15-5.3(a)(2).

(ii) If there is ever just one employee on the premises while the facility is operating, the employee shall have immediate access to a device, such as a telephone, immediately available at the scene of operation, or a hand-held two-way radio, capable of summoning external emergency assistance, unless such a device is not required in R315-15-5.3(a)(2).

(5) Required aisle space. The owner or operator shall maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency, unless aisle space is not needed for any of these purposes.

(6) Arrangements with local authorities.

(i) The owner or operator shall attempt to make the following arrangements, as appropriate for the type of used oil handled at the facility and the potential need for the services of these organizations:

(A) Arrangements to familiarize police, fire departments,

and emergency response teams with the layout of the facility, properties of used oil handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to roads inside the facility, and possible evacuation routes;

(B) Where more than one police and fire department might respond to an emergency, agreements designating primary emergency authority to a specific police and a specific fire department, and agreements with any others to provide support to the primary emergency authority;

(C) Agreements with State emergency response teams, emergency response contractors, and equipment suppliers; and

(D) Arrangements to familiarize local hospitals with the properties of used oil handled at the facility and the types of injuries or illnesses that could result from fires, explosions, or releases at the facility.

(ii) Where State or local authorities decline to enter into such arrangements, the owner or operator shall document the refusal in the facility's operating record.

(b) Contingency plan and emergency procedures. Owners and operators of used oil processor and re-refiner facilities shall comply with the following requirements:

(1) Purpose and implementation of contingency plan.

(i) Each owner or operator shall have a contingency plan for the facility. The contingency plan shall be designed to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden release of used oil to air, soil, groundwater, or surface water.

(ii) The provisions of the plan shall be carried out immediately whenever there is a fire, explosion, or release of used oil that could threaten human health or the environment.

(2) Content of contingency plan.

(i) The contingency plan shall describe the actions facility personnel shall take to comply with R315-15-5.3(b)(1) and (6) in response to fires, explosions, or any unplanned sudden or non-sudden release of used oil to air, soil, groundwater, or surface water at the facility.

(ii) If the owner or operator has already prepared a Spill Prevention, Control, and Countermeasures (SPCC) Plan in accordance with 40 CFR 112 or some other emergency or contingency plan, the owner or operator need only amend that plan to incorporate used oil management provisions necessary to comply with the requirements of R315-15.

(iii) The plan shall describe arrangements agreed to by local police departments, fire departments, hospitals, contractors, and State and local emergency response teams to coordinate emergency services, in accordance with R315-15-5.3(a)(6).

(iv) The plan shall list names, addresses, and phone numbers, of all persons qualified to act as 24-hour emergency coordinator. This list shall be kept up to date. Where more than one person is listed, one shall be named as primary emergency coordinator and others shall be listed in the order in which they will assume responsibility as alternates. See also R315-15-5.3(b)(5).

(v) The plan shall include a list of all emergency equipment at the facility, such as fire extinguishing systems, spill control equipment, communications and alarm systems, internal and external, and decontamination equipment, where this equipment is required. This list shall be kept up to date. In addition, the plan shall include the location and a physical description of each item on the list, and a brief outline of its capabilities.

(vi) The plan shall include an evacuation plan for facility personnel where there is a possibility that evacuation could be necessary. This plan shall describe signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes, in cases where the primary routes could be blocked by releases of used oil or fires.

(3) Copies of contingency plan. A copy of the contingency plan and all revisions to the plan shall be:

(i) Maintained at the facility; and

(ii) Submitted to all local police departments, fire departments, hospitals, and State and local emergency response teams that may be called upon to provide emergency services.

(4) Amendment of contingency plan. The contingency plan shall be reviewed, and immediately amended, if necessary, whenever:

(i) Applicable regulations are revised;

(ii) The plan fails in an emergency;

(iii) The facility changes its design, construction, operation, maintenance, or other circumstances in a way that materially increases the potential for fires, explosions, or releases of used oil, or changes the response necessary in an emergency;

(iv) The list of emergency coordinators changes; or

(v) The list of emergency equipment changes.

(5) Emergency coordinator. At all times, there shall be at least one employee either on the facility premises or on call, i.e., available to respond to an emergency by reaching the facility within a short period of time, with the responsibility for coordinating all emergency response measures. This emergency coordinator shall be thoroughly familiar with all aspects of the facility's contingency plan, all operations and activities at the facility, the location and characteristic of used oil handled, the location of all records within the facility, and facility layout. In addition, this person shall have the authority to commit the resources needed to carry out the contingency plan.

(6) Emergency procedures.

(i) Whenever there is an imminent or actual emergency situation, the emergency coordinator, or the designee when the emergency coordinator is on call, shall immediately:

(A) Activate internal facility alarms or communication systems, where applicable, to notify all facility personnel; and

(B) Notify appropriate State or local agencies with designated response roles if their help is needed.

(ii) Whenever there is a release, fire, or explosion, the emergency coordinator shall immediately identify the character, exact source, amount, and areal extent of any released materials. The emergency coordinator may do this by observation or review of facility records of manifests and, if necessary, by chemical analysis.

(iii) Concurrently, the emergency coordinator shall assess possible hazards to human health and to the environment that may result from the release, fire, or explosion. This assessment shall consider both direct and indirect effects of the release, fire, or explosion, e.g., the effects of any toxic, irritating, or asphyxiating gases that are generated, or the effects of any hazardous surface water run-offs from water or chemical agents used to control fire and heat-induced explosions.

(iv) If the emergency coordinator determines that the facility has had a release, fire, or explosion that could threaten human health, or the environment, outside the facility, the coordinator shall report the findings as follows:

(A) If the emergency coordinator assessment indicates that evacuation of local areas may be advisable, he shall immediately notify appropriate local authorities. The coordinator shall be available to help appropriate officials decide whether local areas should be evacuated; and

(B) The emergency coordinator shall implement the actions as required in Section R315-15-9.

(v) During an emergency, the emergency coordinator shall take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other used oil or hazardous waste at the facility. These measures shall include, where applicable, stopping processes and operation, collecting and containing released used oil, and removing or isolating containers.

(vi) If the facility stops operation in response to a fire, explosion, or release, the emergency coordinator shall monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, wherever this is appropriate.

(vii) Immediately after an emergency, the emergency coordinator shall provide for recycling, storing, or disposing of recovered used oil, contaminated soil or surface water, or any other material that results from a release, fire, or explosion at the facility.

(viii) The emergency coordinator shall ensure that, in the affected area(s) of the facility:

(A) No waste or used oil that may be incompatible with the released material is recycled, treated, stored, or disposed of until cleanup procedures are completed; and

(B) All emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.

(C) The owner or operator shall notify the Director, and appropriate local authorities that the facility is in compliance with R315-15-5.3(b)(6)(viii)(A) and (B) before operations are resumed in the affected area(s) of the facility.

(ix) The owner or operator shall note in the operating record the time, date, and details of any incident that requires implementing the contingency plan. Within 15 days after the incident, the owner or operator shall submit a written report on the incident to the Director. The report shall include:

(A) Name, address, and telephone number of the owner or operator;

(B) Name, address, and telephone number of the facility;

(C) Date, time, and type of incident, e.g., fire, explosion;

(D) Name and quantity of material(s) involved;

(E) The extent of injuries, if any;

(F) An assessment of actual or potential hazards to human health or the environment, where this is applicable; and

(G) Estimated quantity and disposition of recovered material that resulted from the incident.

5.4 REBUTTABLE PRESUMPTION FOR USED OIL

(a) To ensure that used oil managed at a processing/refining facility is not hazardous waste under the rebuttable presumption of R315-15-1.1(b)(1)(ii), the owner or operator of a used oil processing/re-refining facility shall determine whether the total halogen content of used oil managed at the facility is above or below 1,000 ppm.

(b) The owner or operator shall make this determination by:

(1) Testing the used oil; or

(2) Applying and documenting generator knowledge of the halogen content of the used oil in light of the materials and processes used.

(c) If the used oil contains greater than or equal to 1,000 ppm total halogens, it is presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste listed in R315-261-30 through 33 and 35. The owner or operator may rebut the presumption by demonstrating that the used oil does not contain hazardous waste, for example, by using an analytical method from EPA SW-846, Edition III, Update IV to show that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in R315-261 Appendix VIII.

(1) The rebuttable presumption does not apply to metalworking oils/fluids containing chlorinated paraffins, if they are processed, through a tolling agreement, to reclaim metalworking oils/fluids. The presumption does apply to metalworking oils/fluids if such oils/fluids are recycled in any other manner, or disposed.

(2) The rebuttable presumption does not apply to used oils contaminated with chlorofluorocarbons (CFCs) removed from refrigeration units where the CFCs are destined for reclamation. The rebuttable presumption does apply to used oils

contaminated with CFCs that have been mixed with used oil from sources other than refrigeration units.

5.5 USED OIL MANAGEMENT

Used oil processor/re-refiners are subject to all applicable Spill Prevention, Control and Countermeasures, found in 40 CFR 112, in addition to the requirements of R315-15-5. Used oil processors/re-refiners are also subject to the standards and requirements found in R311-200 through R311-209, Underground Storage Tanks, for used oil stored in underground tanks whether or not the used oil exhibits any characteristics of hazardous waste, in addition to the requirements of R315-15-5.

(a) Management units. Used oil processors/re-refiners may not store used oil in units other than tanks, containers, or units subject to regulation under R315-264 or R315-265.

(b) Condition of units. Containers and aboveground tanks including their associated pipes and valves used to store or process used oil at processing and re-refining facilities shall be:

(1) In good condition, with no severe rusting, apparent structural defects, or deterioration;

(2) Not leaking; and

(3) Closed during storage except when used oil is being added or removed.

(c) Secondary containment. Containers and aboveground tanks used to store or process used oil at processing and re-refining facilities including their pipe connections and valves shall be equipped with a secondary containment system.

(1) The secondary containment system shall consist of:

(i) Dikes, berms, or retaining walls; and

(ii) A floor. The floor shall cover the entire area within the dike, berm, or retaining wall, except areas where existing portions of aboveground tanks meet the ground; or

(iii) An equivalent secondary containment system approved by the Director.

(2) The entire containment system, including walls and floors, shall be sufficiently impervious to used oil to prevent any used oil released into the containment system from migrating out of the system to the soil, groundwater, or surface water.

(3) The secondary containment system shall be of sufficient size and volume to prevent any used oil released from tanks and containers described in R315-15-5.5(a), from migrating out of the system to the soil, groundwater, or surface water.

(4) Water, used oil, or other liquids shall be removed from secondary containment within 24 hours of their discovery.

(5) Used oil shall not be stored or allowed to accumulate in sumps and similar water-containment structures at the facility. Any used oil in such sumps shall be removed within 24 hours of its discovery.

(d) Labels.

(1) Containers and aboveground tanks used to store or process used oil at processing and re-refining facilities shall be labeled or marked clearly with the words "Used Oil."

(2) Fill pipes used to transfer used oil into underground storage tanks at processing and re-refining facilities shall be labeled or marked clearly with the words "Used Oil."

(e) Response to releases. Upon detection of a release of used oil to the environment not subject to the requirements of R311-202-1, which incorporates by reference 40 CFR 280, Subpart F, an owner/operator shall comply with R315-15-9.

(f) Closure.

(1) Aboveground tanks. Owners and operators who store or process used oil in aboveground tanks shall comply with the following requirements:

(i) At closure of a tank system, the owner or operator shall remove or decontaminate used oil residues in tanks, contaminated containment system components, contaminated soils, and structures and equipment contaminated with used oil, and manage them as hazardous waste, unless the materials are not hazardous waste under this chapter. Nonhazardous solid

waste must be managed in accordance with R315-301-4.

(ii) If the owner or operator demonstrates that not all contaminated soils can be practicably removed or decontaminated as required in R315-15-5.5(f)(1)(i), then the owner or operator shall close the tank system and perform post-closure care in accordance with the closure and post-closure care requirements that apply to hazardous waste landfills, 40 CFR 265.310 which is adopted by reference.

(2) Containers. Owners and operators who store used oil in containers shall comply with the following requirements:

(i) At closure, containers holding used oils or residues of used oil shall be removed from the site;

(ii) The owner or operator shall remove or decontaminate used oil residues, contaminated containment system components, contaminated soils, and structures and equipment contaminated with used oil, and manage them as hazardous waste, unless the materials are not hazardous waste under R315-261.

5.6 ANALYSIS PLAN

Owners or operators of used oil processing/re-refining facilities shall develop and follow a written used oil analysis plan describing the procedures that will be used to comply with the analysis requirements of R315-15-5.4, R315-15-18, and, if applicable, the marketer requirements in R315-15-7.3. The owner or operator shall keep the plan at the facility.

(a) Rebuttable presumption for used oil in R315-15-5.4. The plan shall specify the following:

(1) Whether sample analyses documented generator knowledge of the halogen content of the used oil, or both, will be used to make this determination.

(2) If sample analyses are used to make this determination, the plan shall specify:

(i) The sampling method used to obtain representative samples to be analyzed. A representative sample may be obtained using either:

(A) One of the sampling methods in R315-261 Appendix I; or

(B) A method shown to be equivalent under R315-260-21;

(ii) The frequency of sampling to be performed, and whether the analysis will be performed onsite or offsite; and

(iii) The methods used to analyze used oil for the parameters specified in R315-15-5.4; and

(3) The type of information that will be used to determine the halogen content of the used oil.

(b) On-specification used oil fuel in R315-15-7.3. At a minimum, the plan shall specify the following if R315-15-7.3 is applicable:

(1) Whether sample analyses or other information will be used to make this determination;

(2) If sample analyses are used to make this determination:

(i) The sampling method used to obtain representative samples to be analyzed. A representative sample may be obtained using either:

(A) One of the sampling methods in R315-261, Appendix I; or

(B) A method shown to be equivalent under R315-260-21;

(ii) Whether used oil will be sampled and analyzed prior to or after any processing/re-refining;

(iii) The frequency of sampling to be performed, and whether the analysis will be performed on-site or off-site; and

(iv) The methods used to analyze used oil for the parameters specified in R315-15-7.3.

(3) The type of information that will be used to make the on-specification used oil fuel determination.

5.7 TRACKING

(a) Acceptance. Used oil processors/re-refiners shall keep a written record of each used oil shipment accepted for processing/re-refining. These records shall take the form of a log, invoice, manifest, bill of lading, or other shipping

documents. Records for each shipment shall include the following information:

(1) The name and address of the transporter who delivered the used oil to the processor/re-refiner;

(2) The name and address of the generator or processor/re-refiner from whom the used oil was sent for processing/re-refining;

(3) The EPA identification number of the transporter who delivered the used oil to the processor/re-refiner;

(4) The EPA identification number, if applicable, of the generator or processor/re-refiner from whom the used oil was sent for processing/re-refining;

(5) The quantity of used oil accepted;

(6) The date of acceptance; and

(7) Written documentation that the processor/re-refiner has met the rebuttable presumption requirements of R315-15-5.4 and the PCB testing requirements of R315-15-18.

(b) Delivery. Used oil processor/re-refiners shall keep a written record of each shipment of used oil that is shipped to a used oil burner, processor/re-refiner, or disposal facility. These records may take the form of a log, invoice, manifest, bill of lading, or other shipping documents. Records for each shipment shall include the following information:

(1) The name and address of the transporter who delivers the used oil to the burner, processor/re-refiner, or disposal facility;

(2) The name and address of the burner, processor/re-refiner, or disposal facility that will receive the used oil;

(3) The EPA identification number of the transporter who delivers the used oil to the burner, processor/re-refiner, or disposal facility;

(4) The EPA identification number of the burner, processor/re-refiner, or disposal facility that will receive the used oil;

(5) The quantity of used oil shipped; and

(6) The date of shipment.

(c) Record retention. The records described in paragraphs (a) and (b) of this section shall be maintained for at least three years at the permitted facility or other location approved by the Director.

5.8 OPERATING RECORD AND REPORTING

(a) Operating record.

(1) The owner or operator of the processor/re-refiner facility shall keep a written operating record at the facility.

(2) The following information shall be recorded, as it becomes available, and maintained in the operating record until closure of the facility:

(i) Records and results of used oil analyses performed as described in the analysis plan required under R315-15-5.6;

(ii) Summary reports and details of all incidents that require implementation of the contingency plan as specified in R315-15-5.3(b); and

(iii) Records detailing the mass balance of wastewater entering and leaving the facility. This includes wastewater discharge records. This does not include water used in non-contact cooling processes.

(b) Reporting. A used oil processor/re-refiner shall report annually March 1 to the Director. The report shall be consistent with the requirements of R315-15-13.5(d).

5.9 OFF-SITE SHIPMENTS OF USED OIL

Used oil processors/re-refiners who initiate shipments of used oil offsite shall ship the used oil using a used oil transporter who has obtained an EPA identification number, a permit, and current used oil handler certificate issued by the Director.

5.10 ACCEPTANCE OF OFF-SITE USED OIL

Processors accepting used oil from off site shall ensure that transporters delivering used oil to their facility have obtained a current used oil transporter permit and an EPA identification

number.

5.11 MANAGEMENT OF RESIDUES

Owners and operators who generate residues from the storage, processing, or re-refining of used oil shall manage the residues as specified in R315-15-1.1(e).

R315-15-6. Standards for Used Oil Burners Who Burn Used Oil for Energy Recovery.

6.1 APPLICABILITY

(a) General. A used oil burner is a person who burns used oil for energy recovery. An on-specification used oil burner is a person who only burns used oil that meets the specifications of R315-15-1.2. Used oil that has not been determined to be on-specification used oil by a Utah-registered marketer shall be managed as off-specification used oil except as described R315-15-2.4. An off-specification used oil burner is a person who burns used oil not meeting the specifications found in R315-15-1.2 for energy recovery. Facilities burning used oil for energy recovery under the following conditions are subject to R315-15-6.1(a) and (b) and R315-15-6.2(b) and (c), but not other portions of R315-15-6:

(1) The used oil is burned by the generator in an on-site space heater under the provisions of R315-15-2.4;

(2) The used oil is burned by a processor/re-refiner for purposes of processing used oil, which is considered burning incidentally to used oil processing; or

(3) The used oil burned by the facility is obtained from a Utah-registered marketer who claims and has demonstrated that the used oil meets the used oil fuel specifications set forth in R315-15-1.2 and who delivers the used oil in the manner set forth in R315-15-7.5(b).

(b) Other applicable provisions. In addition to the requirements of R315-15-6.1(a), used oil burners who conduct the following activities are subject to the requirements of R315-15 as indicated below.

(1) Burners who generate used oil shall comply with R315-15-2;

(2) Burners who transport used oil shall comply with R315-15-4;

(3) Except as provided in R315-15-6.2(b)(2), burners who process or re-refine used oil shall comply with Section R315-15-5;

(4) Burners who direct shipments of off-specification used oil from their facility to an off-specification used oil burner or first claim that used oil that is to be burned for energy recovery meets the used oil fuel specifications set forth in R315-15-1.2 shall comply with R315-15-7 and R315-15-13.7;

(5) Burners who dispose of used oil shall comply with R315-15-8; and

(6) Burners who collect used oil shall also comply with the collection center requirements in R315-15-3. Burners may only burn used oil collected from other generators if that used oil has been certified to be on-specification used oil by a Utah-registered used oil marketer in compliance with R315-15-7. Burners who collect and burn used oil that is not "do-it-yourselfer" or farmer-generated as described in R315-15-2.1(a)(1) and (4), shall obtain a used oil marketer registration before burning such oil and shall comply with the provisions of R315-15-7.

(7) Tanks, containers, and piping that previously contained listed hazardous waste. Unless tanks, containers, and piping that previously contained listed hazardous waste are decontaminated as described in R315-261-7 prior to storing used oil, the used oil is considered to have been mixed with the hazardous waste and shall be managed as hazardous waste unless, under the provisions of R315-15-1.1(b), the hazardous waste and used oil mixture is determined not to be hazardous waste.

(8) Tanks, containers, and piping that previously contained

PCB-contaminated material. Unless tanks, containers, and piping that previously contained PCB-contaminated material are decontaminated as described in 40 CFR 761 Subpart S prior to transfer of used oil, the used oil is considered to have been mixed with the PCB-contaminated material and shall be managed as PCB-contaminated material in accordance with R315-15-18.

(c) Off-specification used oil burner permit. Off-specification used oil burners shall obtain a permit from the Director prior to burning off-specification used oil unless exempted by R315-15-13.6(b)(5). An application for a permit shall contain the information required by R315-15-13.6(b). Off-specification used oil burners shall also obtain a used oil handler certificate in accordance with R315-15-13.8.

(d) Testing of used oil fuel for PCBs. Used oil to be burned for energy recovery is presumed to contain quantifiable levels, 2 ppm or greater, of PCBs unless a used oil marketer obtains laboratory analyses that the used oil fuel does not contain quantifiable levels of PCBs. The person who first claims that the used oil fuel does not contain a quantifiable level of PCBs shall obtain analyses or other information to support the claim, as described in R315-15-18.

6.2 RESTRICTIONS ON BURNING

(a) Off-specification used oil fuel may be burned for energy recovery in only the following devices:

(1) Industrial furnaces identified in R315-260-10;

(2) Boilers, as defined in R315-260-10, that are identified as follows:

(i) Industrial boilers located on the site of a facility engaged in a manufacturing process where substances are transformed into new products, including the component parts of products, by mechanical or chemical processes;

(ii) Utility boilers used to produce electric power, steam, heated or cooled air, or other gases or fluids for sale;

(iii) Used oil-fired space heaters provided that the burner meets the provisions of R315-15-2.4; or

(3) Hazardous waste incinerators subject to regulation under R315-264-340 through 351 or 40 CFR 265.340 through 352 which are adopted by reference.

(b)(1) With the exception of the aggregation activity described in R315-15-6.2(b)(2), used oil burners may not process used oil unless they also comply with R315-15-5.

(2) Off-specification used oil burners may aggregate off-specification used oil with virgin oil or on-specification used oil for purposes of burning, but may not aggregate for purposes of marketing on-specification used oil without also complying with the processor/re-refiner requirements in R315-15-5.

(c) Burning of hazardous waste. Used oil burners may only burn hazardous waste if they are permitted to do so by the Director.

6.3 NOTIFICATION FOR OFF-SPECIFICATION USED OIL BURNERS

(a) Identification numbers. Off-specification used oil burners who have not previously complied with the notification requirements of RCRA section 3010 shall comply with these requirements and obtain an EPA identification number.

(b) Mechanics of notification. An off-specification used oil burner who has not received an EPA identification number may obtain one by notifying the Director of their used oil activity by submitting either:

(1) A completed EPA Form 8700-12.; or

(2) A letter to the Director requesting an EPA identification number. The letter shall include the following information:

(i) Burner company name;

(ii) Owner of the burner company;

(iii) Mailing address for the burner;

(iv) Name and telephone number for the burner point of contact;

- (v) Type of used oil activity; and
- (vi) Location of the burner facility.

6.4 REBUTTABLE PRESUMPTION FOR USED OIL

(a) To ensure that used oil managed at a used oil burner facility is not hazardous waste under the rebuttable presumption of Subsection R315-15-1.1(b)(1)(ii), a used oil burner shall determine whether the total halogen content of used oil managed at the facility is above or below 1,000 ppm.

(b) The used oil burner shall determine if the used oil contains above or below 1,000 ppm total halogens by

- (1) Testing the used oil;
- (2) Applying documented generator knowledge of the halogen content of the used oil in light of the materials and processes used; or
- (3) Using information provided by the processor/re-refiner, if the used oil has been received from a processor/re-refiner subject to regulation under R315-15-5.

(c) If the used oil contains greater than or equal to 1,000 ppm total halogens, it is presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste listed in R315-261-30 through 33 and 35. The owner or operator may rebut the presumption by demonstrating that the used oil does not contain hazardous waste, for example, by using an analytical method from SW-846, Edition III update IV, to show that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in R315-261 Appendix VIII.

(1) The rebuttable presumption does not apply to metalworking oils/fluids containing chlorinated paraffins, if they are processed through a tolling arrangement, as described in R315-15-2.5(c), to reclaim metalworking oils/fluids. The presumption does apply to metalworking oils/fluids if such oils/fluids are recycled in any other manner or disposed.

(2) The rebuttable presumption does not apply to used oils contaminated with chlorofluorocarbons (CFCs) removed from refrigeration units where the CFCs are destined for reclamation. The rebuttable presumption does apply to used oils contaminated with CFCs that have been mixed with used oil from sources other than refrigeration units.

(d) Record retention. Records of analyses conducted or information used to comply with R315-15-6.4(a), (b), and (c) shall be maintained at the burner facility or another facility approved by the Director for at least 3 years.

6.5 USED OIL STORAGE AT OFF-SPECIFICATION USED OIL BURNER FACILITIES

Off-specification used oil burners are subject to all applicable Spill Prevention, Control and Countermeasures, 40 CFR part 112, in addition to the requirements of R315-15-6. Used oil burners are also subject to the standards and requirements of R311-200 through R311-209, Underground Storage Tanks, for used oil stored in underground tanks whether or not the used oil exhibits any characteristics of hazardous waste, in addition to the requirements of R315-15-6.

(a) Storage units. Off-specification used oil burners may not store used oil in units other than tanks, containers or units subject to regulation under R315-264 and R315-265.

(b) Condition of units. Containers and aboveground tanks used to store oil at off-specification used oil burner facilities shall be:

- (1) In good condition, with no severe rusting, apparent structural defects, or deterioration; and
- (2) Not leaking.
- (c) Secondary containment. Containers and aboveground tanks used to store off-specification used oil at burner facilities, including their pipe connections and valves, shall be equipped with a secondary containment system.

- (1) The secondary containment system shall consist of:
 - (i) Dikes, berms, or retaining walls; and
 - (ii) A floor. The floor shall cover the entire area within the

dike, berm, or retaining wall, except areas where existing portions of aboveground tanks meet the ground.

(iii) Other equivalent secondary containment approved by the Director.

(2) The entire containment system, including walls and floor, shall be of sufficient extent and sufficiently impervious to used oil to prevent any used oil released into the containment system from migrating out of the system to the soil, groundwater, or surface water.

(3) Any accumulation of water, used oil, or other liquid shall be removed from secondary containment within 24 hours of discovery.

(4) Used oil shall not be stored or allowed to accumulate in sumps and similar water-containment structures at the facility. Any used oil in sumps and similar water-containment structures shall be removed within 24 hours of its discovery.

(d) Labels.

(1) Containers and aboveground tanks used to store off-specification used oil at burner facilities shall be labeled or marked clearly with the words "Used Oil."

(2) Fill pipes used to transfer off-specification used oil into underground storage tanks at burner facilities shall be labeled or marked clearly with the words "Used Oil."

(e) Response to releases. Upon detection of a release of used oil to the environment not subject to the requirements of R311-202-1, a burner shall comply with R315-15-9.

6.6 TRACKING FOR OFF-SPECIFICATION USED OIL FACILITIES

(a) Acceptance. Off-specification used oil burners shall keep a record of each off-specification used oil shipment accepted for burning. These records may take the form of a log, invoice, manifest, bill of lading, or other shipping documents. Records for each shipment shall include the following information:

- (1) The name and address of the transporter who delivered the used oil to the burner;
- (2) The name and address of the generator or processor/re-refiner from whom the used oil was sent to the burner;
- (3) The EPA identification number of the transporter who delivered the used oil to the burner;
- (4) The EPA identification number, if applicable, of the generator or processor/re-refiner from whom the used oil was sent to the burner;
- (5) The quantity of used oil accepted;
- (6) The date of acceptance; and
- (7) Documentation demonstrating that the transporter has met the rebuttable presumption requirements of R315-15-6.4 and, where applicable, the PCB testing requirements of R315-15-18;

(b) Record retention. The records described in paragraph (a) of this section shall be maintained for at least three years.

6.7 NOTICES

(a) Certification. Before a burner accepts the first shipment of off-specification used oil fuel from a generator, transporter, or processor/re-refiner, the burner shall provide to the generator, transporter, or processor/re-refiner a one-time written and signed notice certifying that:

- (1) The burner has notified the Director of the location and general description of the burner's used oil management activities; and
- (2) The burner will burn the off-specification used oil only in an industrial furnace or boiler identified in R315-15-6.2(a).

(b) Certification retention. The certification described in R315-15-6.7(a) shall be maintained, at the permitted facility or other location approved by the Director, for three years from the date the burner last receives shipment of off-specification used oil from that generator, transporter, or processor/re-refiner.

6.8 MANAGEMENT OF RESIDUES AT OFF-SPECIFICATION USED OIL BURNER FACILITIES

Off-specification used oil burners who generate residues from the storage or burning of used oil shall manage the residues as specified in R315-15-1.1(e).

6.9 ACCEPTANCE OF OFF-SITE USED OIL

Off-specification used oil burners accepting used oil from off-site shall ensure that transporters delivering used oil to their facility have obtained a current used oil transporter permit and an EPA identification number.

R315-15-7. Standards for Used Oil Fuel Marketers.

7.1 APPLICABILITY

(a) Any person who conducts either of the following activities is a used oil fuel marketer and is subject to the requirements of R315-15-7 and R315-15-13.7:

- (1) Directs a shipment of off-specification used oil from their facility to a used oil burner; or
- (2) First determines and claims that used oil that is to be burned for energy recovery meets the used oil fuel specifications set forth in R315-15-1.2.

(b) The following persons are not used oil fuel marketers subject to R315-15-7:

- (1) Used oil generators, and transporters who transport used oil received only from generators, unless the generator or transporter directs a shipment of off-specification used oil from their facility to a used oil burner. However, processors/re-refiners who burn some used oil fuel for purposes of processing are considered to be burning incidentally to processing. Thus, generators and transporters who direct shipments of off-specification used oil to processors/re-refiners who incidentally burn used oil are not marketers subject to R315-15-7;

(2) Persons who direct shipments of on-specification used oil and who are not the first person to claim the oil meets the used oil fuel specifications of R315-15-1.2.

(c) Any person subject to the requirements of R315-15-7 shall also comply with one of the following:

- (1) R315-15-2 - Standards for Used Oil Generators;
- (2) R315-15-4 - Standards for Used Oil Transporters and Transfer Facilities;
- (3) R315-15-5 - Standards for Used Oil Processors and Re-refiners; or
- (4) R315-15-6 - Standards for Used Oil Burners who Burn Off-Specification Used Oil for Energy Recovery.

(d) A person may not act as a used oil fuel marketer without receiving a registration number and a used oil handler certificate, both issued by the Director as required by R315-15-13.7 and R315-15-13.8.

7.2 PROHIBITIONS

A used oil fuel marketer may initiate a shipment of off-specification used oil only to a used oil burner who:

- (a) Has an EPA identification number; and
- (b) Burns the used oil in an industrial furnace or boiler identified in R315-15-6.2(a).

7.3 ON-SPECIFICATION USED OIL FUEL

(a) Analysis of used oil fuel. A used oil fuel marketer who is a used oil generator, transporter, transfer facility, processor/re-refiner, or burner may determine that used oil that is to be burned for energy recovery meets the fuel specifications of R315-15-1.2 and the PCB requirements of R315-15-18 by performing analyses or obtaining copies of analyses or other information approved by the Director documenting that the used oil fuel meets the specifications. Used oil is not considered to be on-specification until it has been certified as such by a registered used oil fuel marketer in accordance with the used oil fuel marketer's analysis plan, approved by the Director.

(b) Record retention. A generator, transporter, transfer facility, processor/re-refiner, or burner who first certifies that used oil that is to be burned for energy recovery meets the specifications for used oil fuel under R315-15-1.2 and the PCB requirements of R315-15-18 shall keep copies of analyses of the

used oil, or other information used to make the determination, for three years.

7.4 NOTIFICATION

(a) Identification numbers. A used oil fuel marketer subject to the requirements of R315-15-7 who has not previously complied with the notification requirements of RCRA section 3010 shall comply with these requirements and obtain an EPA identification number.

(b) A marketer who has not received an EPA identification number may obtain one by notifying the Director of their used oil activity by submitting either:

- (1) A completed EPA Form 8700-12; or
- (2) A letter to the Director requesting an EPA identification number. The letter shall include the following information:
 - (i) Marketer company name;
 - (ii) Owner of the marketer;
 - (iii) Mailing address for the marketer;
 - (iv) Name and telephone number for the marketer point of contact; and
 - (v) Type of used oil activity, e.g., generator directing shipments of off-specification used oil to a burner.

7.5 TRACKING

(a) Off-specification used oil delivery. Any used oil marketer who directs a shipment of off-specification used oil to a burner shall keep a record of each shipment of used oil to a used oil burner. These records may take the form of a log, invoice, manifest, bill of lading or other shipping documents. Records for each shipment shall include the following information:

- (1) The name and address of the transporter who delivers the used oil to the burner;
- (2) The name and address of the burner who will receive the used oil;
- (3) The EPA identification number of the transporter who delivers the used oil to the burner;
- (4) The EPA identification number of the burner;
- (5) The quantity of used oil shipped; and
- (6) The date of shipment.

(b) On-specification used oil delivery. A generator, transporter, transfer facility, processor/re-refiner, or burner who first certifies that used oil that is to be burned for energy recovery meets the fuel specifications under R315-15-1.2 shall keep a record of each shipment of used oil to an on-specification used oil burner. Records for each shipment shall include the following information:

- (1) The name and address of the facility receiving the shipment;
- (2) The quantity of used oil fuel delivered;
- (3) The date of shipment or delivery; and
- (4) A cross-reference to the record of used oil analysis or other information used to make the determination that the oil meets the specifications required under R315-15-7.3(a) and the PCB requirements of R315-15-18.

(c) Record retention. The records described in R315-15-7.5(a) and (b) shall be maintained for at least three years.

7.6 NOTICES

(a) Certification. Before a used oil generator, transporter, transfer facility, or processor/re-refiner directs the first shipment of off-specification used oil fuel to a burner, he shall obtain a one-time written and signed notice from the burner certifying that:

- (1) The burner has notified the Director stating the location and general description of used oil management activities; and
- (2) The burner has obtained an EPA identification number and, if the off-specification used oil is burned in Utah, an off-specification used oil burner permit and current used oil handler certificate from the Director; and

(3) The burner will burn the off-specification used oil only in an industrial furnace or boiler identified in R315-15-6.2(a).

(b) Certification retention. The certification described in R315-15-7.6(a) of this section shall be maintained for three years, at the permitted facility or other location approved by the Director, from the date the last shipment of off-specification used oil is shipped to the burner.

7.7 LABORATORY ANALYSES

Used oil marketers shall use a Utah-certified laboratory, as specified in R315-15-1.8, to satisfy the analytical requirements of R315-15-7.

R315-15-8. Standards for the Disposal of Used Oil.

8.1 APPLICABILITY

The requirements of R315-15-8 apply to all used oils that cannot be recycled and are therefore being disposed.

8.2 DISPOSAL

(a) Disposal of hazardous used oils. Used oils that are identified as a hazardous waste and that cannot be recycled in accordance with R315-15 shall be managed in accordance with the hazardous waste management requirements of R315-260 through 266, 268, 270, and 273.

(b) Disposal of nonhazardous used oils. Used oils that are not hazardous wastes and cannot be recycled under Rule R315-15 shall be disposed in a solid waste disposal facility meeting the applicable requirements of Rules R315-301 through R315-318.

8.3 USE AS A DUST SUPPRESSANT, WEED SUPPRESSANT, OR FOR ROAD OILING

The use of used oil as a dust suppressant, weed suppressant, or for road oiling or other similar use is prohibited.

R315-15-9. Emergency Controls.

9.1 IMMEDIATE ACTION

In the event of a release of used oil, the person responsible for the material at the time of the release shall immediately:

(a) Take appropriate action to minimize the threat to human health and the environment.

(1) Stop the release;

(2) Contain the release;

(3) Clean up and manage properly the released material as described in R315-15-9.3; and

(4) If necessary, repair or replace any leaking used oil tanks, containers, and ancillary equipment prior to returning them to service.

(b) Notify the Utah State Department of Environmental Quality, 24-hour Answering Service, 801-536-4123 for used oil releases exceeding 25 gallons, or smaller releases that pose a potential threat to human health or the environment. Small leaks and drips from vehicles are considered de minimis and are not subject to the release clean-up provisions of R315-15-9.

(c) Provide the following information when reporting the release:

(1) Name, phone number, and address of person responsible for the release.

(2) Name, title, and phone number of individual reporting.

(3) Time and date of release.

(4) Location of release--as specific as possible including nearest town, city, highway, or waterway.

(5) Description contained on the manifest and the amount of material released.

(6) Cause of release.

(7) Possible hazards to human health or the environment and emergency action taken to minimize that threat.

(8) The extent of injuries, if any.

(d) An air, rail, highway, or water transporter who has discharged used oil shall:

(1) Give notice, if required by 49 CFR 171.15 to the National Response Center, <http://nrc.uscg.mil/nrchp.html>, 800-

424-8802 or 202-426-2675; and

(2) Report in writing as required by 49 CFR 171.16 to the Director, Office of Hazardous Materials Regulations, Materials Transportation Bureau, Department of Transportation, Washington, D.C. 20590.

(e) A water, bulk shipment, transporter who has discharged used oil shall give the same notice as required by 33 CFR 153.203 for oil and hazardous substances.

9.2 EMERGENCY CONTROL VARIANCE

If a release of used oil requires immediate removal to protect human health or the environment, as determined by the Director, a variance to the used oil transporter permit and used oil handler certificate requirement and the US EPA identification number requirement for used oil transporters may be granted by the Director until the released material and any residue or contaminated soil, water, or other material resulting from the release no longer presents an immediate hazard to human health or the environment, as determined by the Director.

9.3 RELEASE CLEAN-UP

The person responsible for the material at the time of the release shall clean up all the released material and any residue or contaminated soil, water or other material resulting from the release or take action as may be required by the Director so that the released material, residue, or contaminated soil, water, or other material no longer presents a hazard to human health or the environment. The Director may require releases to be cleaned up to standards found in US EPA Regional Screening Levels. The cleanup or other required actions shall be at the expense of the person responsible for the release.

9.4 REPORTING

Within 15 days after any release of used oil that is reported under R315-15-9.1(b), the person responsible for the material at the time of the release shall submit to the Director a written report that contains the following information:

(a) The person's name, address, and telephone number;

(b) Date, time, location, and nature of the incident;

(c) Name and quantity of material(s) involved;

(d) The extent of injuries, if any;

(e) An assessment of actual or potential hazards to human health or the environment, where this is applicable; and

(f) The estimated quantity and disposition of recovered material that resulted from the incident.

R315-15-10. Financial Requirements.

(a) Used oil activities. An owner or operator of an off-specification burner facility, transportation facility, processing/re-refining facility, or transfer facility, or a group of such facilities, is financially responsible for:

(1) cleanup and closure costs;

(2) general liabilities, including operation of motor vehicles, worker compensation and contractor liability; and

(3) environmental pollution legal liability for bodily injury or property damage to third parties resulting from sudden or non-sudden used oil releases.

(i)(A) The owner or operator of a permitted used oil facility or operation shall present evidence satisfactory to the Director of its ability to meet these financial requirements.

(B) The owner or operator shall present with its permit application the information the Director requires to demonstrate its general comprehensive liability coverage.

(C) The owner or operator shall use the financial mechanisms described in R315-15-12 to demonstrate its ability to meet the financial requirements of R315-15-10(a)(1) and (a)(3).

(ii) In approving the financial mechanisms used to satisfy the financial requirements, the Director will take into account existing financial mechanisms already in place by the facility if required by R315-264-140 through 151, R315-265-140 through

150, and R311-201-6. Additionally, the Director will consider other relevant factors in approving the financial mechanisms, such as the volumes of used oil handled and existing secondary containment.

(iii) Financial responsibility, environmental pollution legal liability and general liability coverage shall be provided to the Director as part of the permit application and approval process and shall be maintained until released by Director.

(iv) Changes in extent, type, or amount of the environmental pollution legal liability and financial responsibility shall be considered a permit modification requiring notification to and approval from the Director.

(b)(1) Environmental pollution legal liability coverage for third party damages at used oil facilities. Each used oil processor, re-refiner, transfer facility, and off-specification burner shall obtain and maintain environmental pollution liability coverage for bodily injury and property damage to third parties resulting from sudden accidental releases, non-sudden accidental releases, or both, of used oil at its facility. This liability coverage shall be maintained for the duration of the permit or until released by the Director as provided for in R315-15-10.

(2) Changes in extent, type, or amount of the financial mechanism will be considered a permit modification requiring notification to and approval from the Director. The minimum amount of environmental pollution legal liability coverage using an assurance mechanism as specified in this section for third-party damages shall be:

(i) For operations where individual volumes of used oil are greater than 55 gallons, such as tanks, storage vessels, used oil processing equipment, and that are raised above grade-level sufficiently to allow for visual inspection of the underside for releases shall be required to obtain coverage in the amount of \$1 million per occurrence for sudden releases, with an annual aggregate coverage of \$2 million, exclusive of legal defense costs; and

(ii) For operations in whole or part that do not qualify under Subsection R315-15-10(b)(2)(i), coverage shall be in the amount of \$1 million per occurrence for sudden releases, with an annual aggregate coverage of \$2 million, and \$3 million per occurrence for non-sudden releases, with an annual aggregate coverage of \$6 million, exclusive of legal defense costs;

(iii) For operations covered under Subsection R315-15-10(b)(2)(ii), the owner or operator may choose to use a combined liability coverage for sudden and non-sudden accidental releases in the amount of \$4 million per occurrence, with an annual aggregate coverage of \$8 million, exclusive of legal defense costs.

(c) Used oil transporter environmental pollution legal liability coverage for third party damages. Each used oil transporter shall obtain environmental pollution legal liability coverage for bodily injury and property damage to third parties covering sudden accidental releases of used oil from its vehicles and other equipment and containers used during transit, loading, and unloading in Utah, and shall maintain this coverage for the duration of the permit or until released by the Director as provided for R315-15-10. The minimum amount of the coverage for used oil transporters shall be \$1 million per occurrence for sudden releases, with an annual aggregate coverage of \$2 million, exclusive of legal defense costs. Changes in extent, type, or amount of the liability coverage shall be considered a permit modification requiring notification to and approval from the Director.

(d) An owner or operator responsible for cleanup and closure under R315-15-11 or environmental pollution legal liability for bodily injury and property damage to third parties under R315-15-10(b) and (c) shall demonstrate its ability to satisfy its responsibility to the Director through the use of an acceptable financial assurance mechanism indicated under

R315-15-12.

(e) Used Oil Collection Centers. Except for DIYers, who are subject to Utah Code Annotated 19-6-718, an owner of a used oil collection center shall be subject to the same liability requirements as a permitted facility under R315-15-10(a) and (b) unless these requirements are waived by the Director. In accordance with Utah Code Annotated 19-6-710, the Director may waive the requirement of proof of liability insurance or other means of financial responsibility that may be incurred in collecting or storing used oil if the following criteria are satisfied:

(1) The used oil storage tank or container is in good condition with no severe rusting, apparent structural defects or deterioration, and no visible leaks;

(2) There is adequate secondary containment for the tank or container that is impervious to used oil to prevent any used oil released into the secondary containment system from migrating out of the system;

(3) The storage tank or container is clearly labeled with the words "Used Oil";

(4) DIYer log entries are complete including the name and address of the generator, date and quantity of used oil received; and

(5) Oil sorbent material is readily available on site for immediate cleanup of spills.

(f) The Director shall waive an owner or operator from its existing financial responsibility mechanism as described in R315-15-10 when:

(1) The Director approves an alternative mechanism;

(2) The owner or operator has achieved cleanup and closure according to R315-15-11; or

(3) The Director determines that financial responsibility is no longer applicable under R315-15.

(g) State of Utah and Federal government used oil permittees are exempt from the requirements of R315-15-10.

R315-15-11. Cleanup and Closure.

11.1 The owner or operator of a used oil collection, aggregation, transfer, processing/re-refining, or off-specification used oil burning facility shall remove all used oil and used oil residues from the site of operation and return the site to a post-operational land use in a manner that:

(a) Minimizes the need for further maintenance;

(b) Controls, minimizes, or eliminates, to the extent necessary to protect human health and the environment, post-closure escape of used oil, used oil constituents, leachate, contaminated run-off, or used oil decomposition products to the ground or surface waters, or to the atmosphere; and

(c) Complies with the closure requirements of R315-15-11 or supplies evidence acceptable to the Director demonstrating a closure mechanism meeting the requirements of R315-264-140 through 151 and R315-265-140 through 150.

(d) The permittee shall be responsible for used oil, used oil contaminants, or used oil residual materials that have been discharged or migrate beyond the facility property boundary. The permittee is not relieved of all or any responsibility to cleanup, remedy or remediate a release that has discharged or migrated beyond the facility boundary where off-site access is denied. When off-site access is denied, the permittee shall demonstrate to the satisfaction of the Director that, despite the permittee's best efforts, the permittee was unable to obtain the necessary permission to undertake the actions to cleanup, remedy or remediate the discharge or migration. The responsibility for discharges or migration beyond the facility property boundary does not convey any property rights of any sort, or any exclusive privilege to the permittee.

11.2 CLEANUP AND CLOSURE PLAN

(a) Written plan.

(1) The owner or operator of a used oil transfer, off-

specification burner, or processing/re-refining facility shall have a written cleanup and closure plan. The cleanup and closure plan shall be submitted to the Director for approval as part of the permit application.

(2) When physical or operational conditions at the facility change that result in a change in the nature or extent of cleanup and closure or an increase in the estimated costs of cleanup and closure, the owner or operator shall submit a modified plan for review and approval by the Director.

(3) Changes in the amount or face value of a financial mechanism that are the result of the annual inflation update from the application of the implicit price deflator multiplier to a permit cleanup and closure plan cost estimate shall not require approval by the Director.

(4) The adjustment shall be made by recalculating the cleanup closure cost estimate in current dollars or by using an inflation factor derived from the most recent Implicit Price Deflator for Gross Domestic Product published by the U.S. Department of Commerce, Bureau of Economic Analysis in its Survey of Current Business as specified in R315-264-145(b)(1) and (2). The inflation factor is the incremental increase of the latest published annual Deflator to the Deflator for the previous year divided by the previous year Deflator. The first adjustment is made by multiplying the cleanup closure cost estimate by the inflation factor. The result is the adjusted cleanup closure cost estimate. Subsequent adjustments are made by multiplying the latest adjusted cleanup closure cost estimate by the latest inflation factor.

(b) Content of plan. The plan shall identify steps necessary to perform partial or final cleanup and closure of the facility at any point during its active life.

(1) The cleanup and closure plan shall be based on third-party, direct-estimated costs or on third-party costs using RS Means methods, applications, procedures, and use cost values applicable to the location of the facility and include, at least:

(i) A description of how each used oil management unit at the facility will be closed.

(ii) A description of how final cleanup and closure of the facility will be conducted. The description shall identify the maximum extent of the operations that will be cleaned, closed, or both during the active life of the facility.

(iii) The highest cost estimate of the maximum inventory of used oil to be stored onsite at any one time during the life of the facility and a detailed description of the methods to be used during partial cleanup and closure final cleanup and closure, or both, including, but not limited to, methods for removing, transporting, or disposing of all used oil, and identification of the off-site used oil facilities to be used, if applicable.

(iv) A detailed description of the steps needed to remove or decontaminate all used oil and used oil residues and contaminated containment system components, equipment, structures, and soils during partial or final cleanup and closure, including procedures for cleaning equipment and removing contaminated soils, methods for sampling and testing surrounding soils, and criteria for determining the extent of decontamination required to satisfy closure. This description shall address the management and disposal of all residues resulting from the decontamination activity, including, but not limited to, rinse waters, rags, personal protective equipment, small hand implements, vehicles, and mechanized equipment.

(v) A detailed description of other activities necessary during the cleanup and closure period to ensure that all partial closures shall satisfy the final cleanup and closure plan.

(vi) A cleanup and closure cost estimate and a mechanism for financial responsibility to cover the cost of cleanup and closure

(vii) State of Utah and Federal government used oil permittees are exempt from the requirements of R315-15-11(b)(1)(vi).

(2) The owner or operator shall update its cleanup and closure plan cost estimate and provide the updated estimate to the Director, in writing, within 60 days following a facility modification that causes an increase in the amount of the financial responsibility required under R315-15-10. Within 30 days of the Director's approval of a permit modification for the cleanup and closure plan that would result in an increased cost estimate, the owner or operator shall provide to the Director:

(i) evidence that the financial assurance mechanism amount or value includes the cleanup and closure cost estimate increase; or

(ii) other mechanisms covering the increased closure plan cost estimate and a summary document indicating the multiple financial mechanisms, by mechanism name, account number, and the amounts to satisfy R315-15-10 and 11.

(c) The owner or operator shall update the cleanup and closure cost estimate to adjust for inflation and include the updated estimate in the permitted facility's annual report due by March 1st of each year, using either:

(1) the multiplier formed from the gross domestic product implicit price deflator ratio of the current calendar year to the past calendar year as published by the federal government Bureau of Economic Analysis; or

(2) new cleanup and closure cost estimate from the recalculation of the cleanup and closure plan costs to account for all changes in scope and nature of the facility or facilities, in current dollars.

11.3 TIME ALLOWED TO INITIATE CLOSURE

(a) The owner or operator shall initiate closure in accordance with the approved cleanup and closure plan and notify the Director that closure has been initiated:

(1) Within 90 days after the owner or operator receives the final volume of used oil; or

(2) Within 90 days after the Director revokes the facility's used oil permit.

(b) During the cleanup and closure period or at any other time, if the Director determines that the owner or operator has failed to comply with R315-15, the Director may, after 30 days following written notice to the owner or operator, draw upon the financial mechanism associated with the cleanup and closure plan for the facility or facilities covered by the financial responsibility requirements of R315-15-10.

11.4 CERTIFICATION OF CLOSURE

(a) Within 60 days of completion of cleanup and closure, the owner or operator of a permitted used oil facility shall submit to the Director, by registered mail, a certification that the used oil facility has been cleaned and closed in accordance with the specifications in the approved cleanup and closure plan. The certification shall be signed by the owner or operator and by an independent, Utah-registered professional engineer.

(b) The Director shall make the determination of whether cleanup and closure has been completed according to the cleanup and closure plan and R315-15.

R315-15-12. Financial Assurance.

12.1 DEFINITIONS

For the purposes of R315-15-12, the following definitions apply:

(a) "Existing used oil facility" means any used oil transfer facility, off-specification burner, or used oil processing/re-refining facility in operation on July 1, 1993 under a used oil operating permit issued by the Division of Oil, Gas and Mining and in effect on or before June 30, 1993. An existing used oil facility is also required to obtain a permit from the Director in accordance with R315-15-13.

(b) "New used oil facility" means any used oil transfer, off-specification burner, or used oil processing/re-refining facility that was not in operation as a used oil facility on July 1, 1993, and received an operating permit in accordance with

R315-15-13 from the Director after July 1, 1993.

(c) "Financial assurance mechanism" means "reclamation surety" as used in Utah Code Annotated 19-6-709 and 19-6-710 of the Used Oil Management Act.

12.2 APPLICABILITY

(a) The owner or operator of an existing or new used oil facility requiring a permit under R315-15-13 shall establish a financial assurance mechanism as evidence of financial responsibility under R315-15-10 sufficient to assure cleanup and closure of the facility in conformance with R315-15-11.1 with one or more of the financial assurance mechanisms of R315-15-12.3 prior to receiving a permit from the Director.

(b) Any increase in capacity to store or process used oil at a used oil facility permitted by the Director, above the storage or processing capacity identified in the permit application approved by the Director, shall require the owner or operator of the permitted used oil facility to increase the amount or face value of the financial assurance mechanism to meet the additional capacity. The additional amount or increase in face value of financial assurance mechanism shall be in place and effective before operation of the increased storage or processing capacity and shall meet the requirements of R315-15-12.3 and R315-15-12.4.

(c) DIYer used oil collection centers, generator used oil collection centers, and used oil aggregation points are not required to post a financial assurance mechanism, but are subject to the cleanup and closure requirements of R315-15-10 and R315-15-11 unless they have received a waiver in writing from the Director as identified in R315-15-10(e).

12.3 FINANCIAL ASSURANCE MECHANISMS

(a) Any financial assurance mechanism used to show financial responsibility under R315-15-10 and 11 for an existing or new used oil facility shall:

(1) be legally valid, binding, and enforceable under Utah and federal law;

(2) be approved by the Director;

(3) ensure that funds will be available in a timely fashion for:

(i) completing all cleanup and closure activities indicated in the closure plan of the permit approved by the Director; and

(ii) environmental pollution legal liability for third party damages for bodily injury and property damage resulting from a sudden or non-sudden accidental release of used oil from or arising from permitted operations; and

(4) require a written notice sent by certified mail to the Director 120 days prior to cancellation or termination of the financial mechanism.

(5) be updated each year to adjust for inflation, using either:

(i) the gross domestic product implicit price deflator ratio of the increase of the current calendar year to the past calendar year or

(ii) a new estimated cleanup and closure cost estimate recalculated to account for all changes in scope and nature of the permitted operation.

(b) The owner or operator of an existing or new used oil facility shall establish a financial assurance mechanism for cleanup and closure by one of the following mechanisms and shall submit a signed original or an original signed duplicate of the financial assurance mechanism to the Director for approval as part of the permit application:

(1) Trust Fund.

(i) The trustee shall be an entity that has the authority to act as a trustee and whose operations are regulated and examined by a federal or state agency.

(ii) A signed original or an original signed duplicate of the trust agreement and accompanied by a formal certification of acknowledgement shall be submitted to the Director.

(iii) For trust funds that are fully funded at the time of

permit approval, an annual trust valuation shall be certified and submitted to the Director. The permittee shall provide evidence annually, upon the anniversary of the trust agreement, that the trust remains fully funded.

(iv) For trust funds not fully funded at the time of permit approval by the Director, incremental payments into the trust fund shall be made annually by the owner or operator to fully fund the trust within five years of the Director's approval of the permit as follows:

(A) initial payment value shall be the initial cleanup and closure cost estimate value divided by the pay-in period, not to exceed five years, and

(B) next payment value shall be the difference of the approved current cleanup and closure cost estimate less the trust fund value, all divided by the remaining number of years in the pay-in period, and

(C) subsequent next payments shall be made into the trust fund annually on or before the anniversary date of the initial payment made into the trust fund and reported in accordance with the approved trust agreement, and

(D) no later than 30 days after the last incremental payment to fully fund the trust, the permittee shall provide proof to the Director that the trust fund has been fully funded according to the current permitted cleanup and closure cost estimate.

(E) The facility shall submit an annual valuation of the trust to the Director on or before the anniversary date of the trust.

(v) For a new used oil facility, the payment into the trust fund shall be made before the initial receipt of used oil.

(vi) The owner or operator, or other person authorized to conduct cleanup and closure activities may request reimbursement from the trustee for cleanup and closure completed when approved in writing by the Director.

(vii) The request for reimbursement may be granted by the trustee as follows:

(A) only if sufficient funds exist to cover the reimbursement request; and

(B) if justification and documentation of the cleanup and closure expenditures are submitted to and approved by the Director in writing prior to the trustee granting reimbursement.

(viii) The Director may cancel the incremental trust funding option at any time and require the permittee to provide either a fully funded trust or other cleanup and closure financial mechanism as provided in R315-15-12 under the following conditions:

(A) upon the insolvency of the permittee, or

(B) when a violation of R315-15-10, 11 or 12 has been determined.

(ix) The trust agreement shall follow the wording provided by the Director as identified in R315-15-17.2.

(2) Surety Bond Guaranteeing Payment.

(i) The bond shall be effective before the initial receipt of used oil.

(ii) The surety company issuing the bond shall, at a minimum, be among those listed as acceptable sureties on Federal bonds in Circular 570 of the U.S. Department of the Treasury and the owner or operator shall notify the Director that a copy of the bond has been placed in the operating record.

(iii) The penal sum of the bond shall be in an amount at least equal to the cleanup and closure cost estimate developed under R315-15-11.2.

(iv) Under the terms of the bond, the surety shall become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond.

(v) The owner or operator shall establish a standby trust agreement at the time the bond is established.

(A) The standby trust agreement shall meet the requirements of R315-15-12.3(b)(1), except for R315-15-

12.3(b)(1)(iii), (viii), and (ix) and the standby trust agreement shall follow the wording provided by the Director as identified in R315-15-17.14.

(B) Payment made under the terms of the bond shall be deposited by the surety directly into the standby trust agreement and payments from the standby trust fund shall be approved by the trustee with the written concurrence of the Director.

(vi) The surety bond shall automatically be renewed on the expiration date unless cancelled by the surety company 120 days in advance by sending both the bond applicant and the Director a written cancellation notice by certified mail.

(vii) The bond applicant may terminate the bond for nonpayment of fee by providing written notice, by certified mail, to the Director 120 days prior to termination.

(viii) Any change to the form or content of the surety bond shall be submitted to the Director for approval and acceptance.

(ix) The surety bond shall follow the language provided by the Director found in R315-15-17.3.

(3) Letter of Credit

(i) The letter of credit shall be effective before the initial receipt of used oil

(ii) The financial institution issuing the letter of credit shall be an entity that has the authority to issue letters of credit and whose letter of credit operations are regulated and examined by a state or federal agency.

(iii) The letter of credit shall be issued in an amount at least equal to the cleanup and closure cost estimate developed under R315-15-11.2.

(iv) The owner or operator shall establish a standby trust agreement at the time the letter of credit is established.

(A) The standby trust agreement shall meet the requirements of R315-15-12.3(b)(1), except for Subsections R315-15-12.3(b)(1)(iii), (viii), and (ix) and the standby trust agreement shall follow the language incorporated by reference in R315-15-17.14.

(B) Payment made under the terms of the letter of credit shall be deposited by the surety directly into the standby trust and payments from the standby trust fund shall be approved by the trustee with the written concurrence of the Director.

(v) The letter of credit shall follow the wording provided by the Director as identified in R315-15-17.4.

(4) Insurance.

(i) The insurance shall be effective before the initial receipt of used oil.

(A) Insurance coverage period shall be the earliest date of permit issuance or a retroactive date established by the earliest period of coverage for any financial assurance mechanism.

(ii) At a minimum, the insurer shall be licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more states.

(iii) The insurance policy shall guarantee that funds will be available to perform the cleanup and closure activities approved by the Director.

(iv) The policy shall guarantee that the insurer will be responsible for the paying out of funds to the owner or operator or person authorized to conduct the cleanup and closure activities, as approved by the Director, up to an amount equal to the face amount of the policy. Payment of any funds by the insurer shall be made with the written concurrence of the Director.

(A) The Insurer shall establish at a standby trust agreement for only the benefit of the Director when the Director notifies the Insurer that the Director is making a claim, as provided for in R315-15, for cleanup and closure of a permitted used oil transfer, processor, re-refiner, or off-specification burner facility.

(B) The Insurer shall place the face value of the applicable coverage in the trust within 30 days of establishing the standby trust agreement.

(C) The standby trust agreement shall meet the requirements of R315-15-12.3(b)(1), except for R315-15-12.3(b)(1)(iii), (iv), (v), (viii), and (xi), and the standby trust agreement shall follow the language provided by the Director incorporated by reference in R315-15-17.14.

(v) The insurance policy shall be issued for a face amount at least equal to the cleanup and closure cost estimate developed under R315-15-11.2.

(vi) An owner or operator, or other person authorized by the Director, may receive reimbursements for cleanup and closure activities completed if:

(A) the value of the policy is sufficient to cover the reimbursement request; and

(B) justification and documentation of the cleanup and closure expenditures are submitted to and approved by the Director, prior to receiving reimbursement.

(vii) Each policy shall contain a provision allowing assignment of the policy to a successor owner or operator.

(viii) The insurance policy shall provide that the insurer may not cancel, terminate, or fail to renew the policy except for failure to pay the premium. If there is a failure to pay the premium, the insurer may cancel the policy by sending notice of cancellation by certified mail to the owner or operator and the Director 120 days in advance of cancellation. If the insurer cancels the policy, the owner or operator shall obtain an alternate financial assurance mechanism meeting the requirements for financial responsibility under R315-15-10 and of this subsection within 60 days of notice of cancellation of the policy.

(ix) The policy coverage amount for cleanup and closure is exclusive of legal and defense costs.

(x) Bankruptcy or insolvency of the Insured shall not relieve the Insurer of its obligations under the policy.

(xi) The Insurer as first-payer is liable for the payment of amounts within any deductible, retention, self-insured retention (SIR), or reserve applicable to the policy, with a right of reimbursement by the Insured for any such payment made by the Insurer. This provision does not apply with respect to that amount of any deductible, retention, self-insured retention, or reserve for which coverage is otherwise demonstrated as specified in R315-15-12.

(xii) Whenever requested by the Director, the Insurer agrees to furnish to the Director a signed duplicate original of the policy and all endorsements.

(xiii) Cancellation of the policy, whether by the Insurer, the Insured, a parent corporation providing insurance coverage for its subsidiary, or by a firm having an insurable interest in and obtaining liability insurance on behalf of the owner or operator of the used oil management facility, will be effective only upon written notice and only after the expiration of 120 days after a copy of such written notice is received by the Director for those facilities that are located in Utah.

(xiv) Any other termination of the policy will be effective only upon written notice and only after the expiration of 120 days after a copy of such written notice is received by the Director for those facilities that are located in Utah.

(xv) All policy provisions related to R315-15 shall be construed in accordance with the laws of the State of Utah. In the event of the failure of the Insurer to pay any amount claimed to be due hereunder, the Insurer and the Insured will submit to the jurisdiction of the appropriate court of the State of Utah, and will comply with all the requirements necessary to give such court jurisdiction. All matters arising hereunder, including questions related to the interpretation, performance and enforcement of this policy, shall be determined in accordance with the law and practice of the State of Utah (notwithstanding Utah conflicts of law rules).

(xvi) Endorsement(s) added to, or removed from the policy that have the effect of affecting the environmental

pollution liability language, directly or indirectly, shall be approved in writing by the Director before said endorsement(s) become effective.

(xvii) Neither the Insurer nor the Insured shall contest the state of Utah's use of the drafting history of the insurance policy in a judicial interpretation of the policy or endorsement(s) to said policy.

(xviii) The Insurer shall establish a standby trust fund for the benefit of the Director at the time the Director first makes a claim against the insurance policy.

(A) The standby trust fund shall meet the requirements of R315-15-12.3(b)(1), except for item R315-15-12.3(b)(1)(iii), (iv), (v), (viii), and (ix) and the standby trust agreement shall follow the wording found in R315-15-17.14.

(B) Payment made under the terms of the insurance policy shall be deposited by the Insurer as grantor directly into the standby trust fund and payments from the trust fund shall be approved by the trustee with the written concurrence of the Director.

(5) The owner or operator of an existing or new used oil facility may establish a financial assurance mechanism by a combination of the above mechanisms as approved by the Director.

(c) The owner or operator of an existing or new used oil facility or operation shall establish a financial assurance mechanism for bodily injury and property damage to third parties resulting from sudden and/or non-sudden accidental releases of used oil from a permitted used oil facility or operation as follows:

(1) An owner or operator that is a used oil processor, transfer facility, or off-specification burner, or a group of such facilities regulated under R315-15 shall demonstrate financial responsibility for bodily injury and property damage to third parties caused by sudden and/or non-sudden accidental release of used oil arising from operations or operations of the facility or group of facilities shall have and maintain liability coverage in the amount as specified in R315-15-10(b). This liability coverage shall be demonstrated by one or more of the financial mechanisms in R315-15-12.3(c)(3).

(2) An owner or operator that is a used oil transporter regulated under R315-15, must demonstrate financial responsibility for bodily injury and property damage to third-parties resulting from sudden release of used oil arising from transit, loading and unloading, to or from facilities within Utah. The owner or operator shall maintain liability coverage for sudden accidental occurrences in the amount specified in R315-15-10(c). This liability coverage shall be demonstrated by one or more of the financial mechanisms in R315-15-12.3(c)(3).

(3) The owner or operator shall demonstrate compliance with R315-15-10(b) or (c) by using one or more of the following financial assurance mechanisms:

(i) Insurance. The owner or operator shall follow the wording provided by the Director identified in R315-15-17.5 through R315-15-17.9, as may be applicable.

(ii) Trust. The owner or operator shall follow the wording provided by the Director identified in R315-15-17.12.

(iii) Surety Bond. The owner or operator shall follow the wording provided by the Director identified in R315-15-17.11.

(iv) Letter of Credit. The owner or operator shall follow the wording provided by the Director identified in R315-15-17.10.

(d) Adjustments by the Director. If the Director determines that the levels of financial responsibility required by R315-15-10(b) or (c), as applicable are not consistent with the degree and duration of risk associated with used oil operations or facilities, the Director may adjust the level of financial responsibility required under R315-15-10(b) or (c), as applicable, as may be necessary to protect human health and the environment. This adjusted level will be based on the Director's

assessment of the degree and duration of risk associated with the used oil operations or facilities. In addition, if the Director determines that there is a significant risk to human health and the environment from non-sudden release of used oil resulting from the used oil operations or facilities, the Director may require that an owner or operator of the used oil facility or operation comply with R315-15-10(b) and (c), as applicable. An owner or operator must furnish, within a reasonable time to the Director when requested in writing, any information the Director requests to determine whether cause exists for an adjustment to the financial responsibility under R315-15-10(b) or (c) with the used oil operations or facilities. Failure to provide the requested information as and when requested under this section may result in the Director revoking the owner's or operator's used oil permit(s). Any adjustment of the level or type of coverage for a facility that has a permit will be treated as a permit modification.

(e) When the owner or operator of a permitted used oil facility or operation believes that its responsibility for cleanup and closure or for environmental pollution liability as described in R315-15-10(d) has changed, it may submit a written request to the Director to modify its permit to reflect the changed responsibility.

(f) The Director may release the requirement for cleanup and closure financial assurance after the owner or operator has clean-closed the facility according to R315-15-11.

(g) The owner or operator of a permitted used oil facility or operation may request the Director to modify its permit to change its financial assurance mechanism or mechanisms as described in R315-15-12.

(h) The Director may modify the permit to change financial assurance mechanism or mechanisms after the owner or operator has established a replacement financial assurance mechanism or mechanisms acceptable to the Director.

(i) Incapacity of owners or operators, guarantor, or financial institution. An owner or operator of a permitted used oil facility or operation shall notify the Director by certified mail within ten days of the commencement of a bankruptcy proceeding naming the owner or operator as debtor.

(1) An owner or operator who fulfills the financial responsibility requirements by obtaining a trust fund, surety bond, letter of credit, or insurance policy will be considered to be without the required financial responsibility or liability coverage in the event of:

(i) bankruptcy of the trustee or issuing institution; or

(ii) a suspension or revocation of the authority of the trustee institution to act as trustee; or

(iii) a suspension or revocation of the authority of the institution to issue a surety bond, a letter of credit, or an insurance policy.

(2) The owner or operator of a permitted used oil facility or operation must establish other financial responsibility or liability coverage within 60 days after such an event.

12.4 ANNUAL UPDATE OF CLOSURE COST ESTIMATE AND FINANCIAL ASSURANCE MECHANISM

(a) The financial responsibility information required by R315-15-10, 11, and 12 and submitted to the Director with the initial permit application for a used oil facility or operation, or information provided as part of subsequent modifications to the permit made thereafter, shall be updated annually.

(b) The following annual updated financial responsibility information for the previous calendar year shall be submitted to the Director by March 1 of each year for each permitted facility or operation:

(1) The cleanup and closure cost estimate shall be based on a third party performing cleanup and closure of the facility to a post-operational land use in accordance with R315-15-11.1.

(2) The financial assurance mechanism shall be adjusted to reflect the new cleanup and closure cost estimate.

(3) The type of financial assurance mechanism, its current face value, and corresponding financial institution's instrument control number shall be provided.

(4) The type of environmental pollution liability financial responsibility for third-party damage mechanism shall be provided, including:

- (i) policy number or other mechanism control number,
- (ii) effective date of policy or other mechanism, and
- (iii) coverage types and amounts.

(5) The type of general liability insurance information shall be provided, including:

- (i) policy number,
- (ii) date of policy, effective date of policy, retroactive date of coverage, if applicable, and
- (iii) coverage types and amounts.

(c) Other type of information deemed necessary to evaluate compliance with a permitted used oil facilities or operations and R315-15-10, 11, and 12, shall be provided upon request by the Director.

R315-15-13. Registration and Permitting of Used Oil Handlers.

13.1 DO-IT-YOURSELFER USED OIL COLLECTION CENTERS TYPES A AND B

(a) Applicability. A person may not operate a do-it-yourselfer (DIYer) Type A or B used oil collection center without holding a registration number issued by the Director.

(b) General. The application for a registration number shall include the following information regarding the DIYer used oil collection center:

- (1) the name and address of the operator;
- (2) the location of the center;
- (3) the type of storage and secondary containment to be used;
- (4) the status of the business, zoning, or other licenses and permits if required by federal, state and local governmental entities;
- (5) a spill containment plan in the event of a release of used oil; and
- (6) proof of insurance or other means of financial responsibility for liabilities that may be incurred in collecting or storing used oil.

(c) Waiver of proof of insurance or other means of financial responsibility for liabilities that may be incurred in collecting or storing used oil. In accordance with Utah Annotated 19-6-710, the Director may waive the requirement of proof of liability insurance or other means of financial responsibility if the following criteria are satisfied:

- (1) The used oil storage tank or container is in good condition with no severe rusting, apparent structural defects or deterioration, and no visible leaks;
- (2) There is adequate secondary containment for the tank or container that is impervious to used oil to prevent any used oil released into the secondary containment system from migrating out of the system to the soil, groundwater or surface water;
- (3) The storage tank or container is clearly labeled with the words "Used Oil;"
- (4) DIYer log entries are complete including the name and address of the generator, date and quantity of used oil received;
- (5) EPA-approved test kits for total halogens are readily available and operators are trained to perform halogen tests on any used oil received that may have been mixed with hazardous waste; and
- (6) Oil sorbent material is readily available on site for immediate clean-up of spills.

(d) Changes in information. The owner or operator of the facility shall notify the Director in writing of any changes in the information submitted to apply for a registration number within

20 days of the change.

13.2 GENERATOR USED OIL COLLECTION CENTERS TYPES C AND D

(a) Applicability. A person may not operate a generator used oil collection center Type C or D without holding a registration number issued by the Director.

(b) General. The application for registration shall include the following information regarding the generator used oil collection center:

- (1) the name and address of the operator;
- (2) the location of the center;
- (3) whether the center will accept DIYer used oil;
- (4) the type of storage and secondary containment to be used;
- (5) the status of the business, zoning, or other licenses and permits if required by federal, state and local governmental entities;
- (6) a spill containment plan in the event of a release of used oil; and
- (7) proof of insurance or other means of financial responsibility for liabilities that may be incurred in collecting or storing used oil.

(c) Permit. Waiver of proof of insurance or other means of financial responsibility for liabilities that may be incurred in collecting or storing used oil. In accordance with Utah Code Annotated 19-6-710, the Director may waive the requirement of proof of liability insurance or other means of financial responsibility if the following criteria are satisfied:

- (1) The used oil storage tank or container is in good condition with no severe rusting, apparent structural defects or deterioration, and no visible leaks;
- (2) There is adequate secondary containment for the tank or container that is impervious to used oil to prevent any used oil released into the secondary containment system from migrating out of the system to the soil, groundwater or surface water;
- (3) The storage tank or container is clearly labeled with the words "Used Oil;"
- (4) DIYer log entries are complete including the name and address of the generator, date and quantity of used oil received;
- (5) EPA-approved test kits for total halogens are readily available and operators are trained to perform halogen tests on any used oil received that may have been mixed with hazardous waste; and
- (6) Oil sorbent material is readily available on site for immediate clean up of spills.

(d) Changes in information. The owner or operator of the facility shall notify the Director in writing of any changes in the information submitted to apply for a registration number within 20 days of the change.

13.3 USED OIL AGGREGATION POINTS

(a) Applicability. A person may operate a used oil aggregation point without holding a registration number issued by the Director if that aggregation point also accepts used oil from household do-it-yourselfers (DIYers) or other generators.

(b) If an aggregation point accepts used oil from household DIYers, it must register with the Director as a DIYer collection center and comply with the DIYer standards in Section R315-15-3.1.

(c) If an aggregation point accepts used oil from other generators it must register with the Director as a generator collection center and comply with the standards in R315-15-3.2.

13.4 USED OIL TRANSPORTERS AND USED OIL TRANSFER FACILITIES

(a) Applicability. Except as provided by R315-15-13.4(f), a person may not operate as a used oil transporter without holding a used oil transporter permit issued by the Director. A person shall not operate a used oil transfer facility without holding a used oil transfer facility permit specific to that facility,

issued by the Director.

(b) General. The application for a permit shall include the following information:

- (1) The name and address of the operator;
- (2) The location of the transporter's base of operations and the location of any transfer facilities, if applicable;
- (3) Maps of all transfer facilities, if applicable;
- (4) The methods to be used for collecting, storing, and delivering used oil;
- (5) The methods to be used to determine if used oil received by the transporter or facility is on-specification or off-specification and how the transporter will comply with the rebuttable requirements of R315-15-4.5;
- (6) The type of containment and the volume, including type and number of storage vessels to be used and the number and type of transportation vehicles, if applicable;
- (7) The methods of disposing of any waste by-products;
- (8) The status of business, zoning, and other applicable licenses and permits if required by federal, state, and local government entities;
- (9) An emergency spill containment plan, including a list of spill containment equipment to be carried in vehicles used to transport used oil and spill containment equipment maintained at the used oil transfer facility, and how the transporter shall comply with the requirements of R315-15-9;
- (10) Proof of liability insurance or other means of financial responsibility for liabilities that may be incurred in collecting, transporting, or storing used oil;
- (11) Proof of form and amount of reclamation surety for any facility used in conjunction with transportation or storage of used oil;
- (12) A closure plan meeting the requirements of R315-15-11;
- (13) Proof of applicant's ownership of any property and facility used for storage of used oil or, if the property and facility is not owned by the applicant, the owners' written statement acknowledging the activities specified in the application;
- (14) For transfer facility permit applications, tank certification in accordance with R315-264-190 through 200 for used oil storage tanks at the transfer facility;
- (15) For transfer facility permit applications, a facility piping and instrument drawing certified by a Professional Engineer;
- (16) If rail transport is part of the application, a loading/off-loading plan for rail tanker cars used to transport used oil. This plan shall include detailed procedures to be followed to minimize the potential for releases and on-site accidents. At a minimum, the following items shall be addressed:
 - (i) Personal safety equipment;
 - (ii) Coordination with railroad to ensure exclusive rights to the loading track during the entire period of loading/offloading;
 - (iii) A minimum number and qualification of workers involved in the loading or off-loading operations;
 - (iv) Braking and blocking of rail car wheels;
 - (v) Procedures for Depressurizing tank car prior to opening manhole covers and outlet valves;
 - (vi) The sequence of valve openings and closings on any hosing or piping involved in the loading or off-loading process;
 - (vii) A description of how and where pipe and hose fitting will be attached, including a description of which rail car valves/openings will be used;
 - (viii) Use of catchment container to collect any used oil released from hoses, valves, and pipes during and following the loading/offloading operation;
 - (ix) Measures to insure ignition sources are not present;
 - (x) Procedures for cleanup of any spills that occur during

the loading/offloading operations; and

(xi) Other site-specific requirements required by the Director to protect human health and the environment.

(c) Permit fees. Registration and permitting fees are established under the terms and conditions of Utah Code Annotated 63J-1-504. A copy of the Division's Fee Schedule is available upon request. Payment of appropriate fees is required prior to issuance of permit approvals and annual used oil handler certificates.

(d) Annual Reporting. Each transporter and transfer facility shall submit an annual report to the Director of its activities during the calendar year. The annual report shall be submitted to the Director no later than March 1, of the year following the reported activities. The Annual report shall either be submitted on a form provided by the Director or shall contain the following information:

- (1) the EPA identification number, name, and address of the transporter/transfer facility;
- (2) the calendar year covered by the report;
- (3) the total amount of used oil transported;
- (4) the itemized amounts and types of used oil transferred to permitted transporters and transfer facilities, used oil processors/re-refiners, off-specification used oil burners, and used oil fuel marketers; and
- (5) the itemized amounts and types of used oil transferred inside and outside the state, indicating the state to which used oil is transferred, and the specific name, address and telephone number of the operations or facility to which used oil was transferred.

(e) Changes in information. The owner or operator of the facility shall notify the Director in writing of any changes in the information submitted to apply for a permit within 20 days of the change.

(f) Transporter and Transfer Facility Permit by rule. Notwithstanding any other provisions of R315-15-13.4, a used oil generator who self-transporters used oil generated by that generator at a non-contiguous operation to a central collection facility in the generator's own service vehicles in quantities exceeding 55 gallons shall be deemed to have an approved used oil transporter permit or used oil transfer facility permits, or both if the generator meets all applicable requirements of R315-15-13.4(f)(1) through (4).

(1) All used oil transporters or transfer facilities who qualify for a permit by rule shall submit a notification to the Director of their intent to operate under R315-15-13.4(f) and comply with the following conditions:

(i) The generator's facility is defined under the North American Industry Classification System (NAICS), published, in 2017 Revision, by the US Economic Classification Policy Committee, with a NAICS code of 21 (Mining), 22 (Utilities), 23 (Construction), 485111 (Mixed Mode Transit Systems), or 541360 (Geophysical Surveying and Mapping Services);

(ii) The generator self-transporters and delivers the used oil to facilities that the generator owns, operates, or both.

(iii) The generator notifies the Director with the information required by R315-15-13.4(b)(1) through (10); and

(iv) The generator complies with R315-15-4.3, R315-15-4.4(b) through (d), R315-15-4.6(b) through (f), R315-15-4.7(b) and (d), and R315-15-4.8.

(2) A generator who self-transporters used oil in accordance with R315-15-13.4(f)(1) and who burns all the collected used oil for energy recovery is deemed to be approved by rule to operate as a used oil transporter for that activity if the following additional conditions are met:

(i) The generator only burns the self-collected used oil for energy recovery at that generator's own central collection facility.

(ii) The generator registers as a used oil fuel marketer in accordance with R315-15-13.7 and complies with R315-15-7.

(3) A generator who self-transported used oil in accordance with R315-15-13.4(f)(1) and only stores the used oil for subsequent collection by permitted used oil transporters is deemed to be approved by rule to operate as a used oil transporter and transfer facility for that activity if the following additional conditions are met:

(i) The generator arranges for permitted used oil transporters to collect the generator's used oil.

(ii) The self-transported used oil is not stored at the generator's facility longer than 35 days. If the self-transported used oil is stored longer than 35 days, the generator becomes a used oil processor in accordance with R315-15-4.6(a) and shall obtain a used oil processor permit in accordance with R315-15-13.5.

(4) A generator who self-transported used oil in accordance with R315-15-13.4(f)(1), and who both burns their collected used oil for energy recovery and arranges for permitted use oil transporters to collect that used oil, is deemed to be approved by rule to operate as a used oil transporter and transfer facility for that activity if the following additional conditions are met:

(i) The self-transported used oil burned for energy recovery is only burned at the generator's central collection facility;

(ii) The generator registers as a used oil fuel marketer in accordance with R315-15-13.7 and complies with R315-15-7; and

(iii) The generator arranges for permitted used oil transporters to collect the generator's used oil not burned on site.

(iv) The self-transported used oil is not stored at the generator's facility longer than 35 days. If the self-transported used oil is stored longer than 35 days, the generator becomes a used oil processor in accordance with R315-15-4.6(a) and shall obtain a used oil processor permit in accordance with R315-15-13.5.

(g) All used oil transporters and transfer facilities shall obtain and maintain a used oil handler certificates in accordance with R315-15-13.8.

13.5 USED OIL PROCESSORS/RE-REFINERS

(a) Applicability. A person may not operate as a used oil processing/re-refining facility without holding a permit issued by the Director.

(b) General. The application for a permit shall include the following information:

(1) The name and address of the operator;

(2) The location of the facility;

(3) A map of the facility;

(4) The grades of oil to be produced;

(5) The methods to be used to determine if used oil received by the transporter or facility is on-specification or off-specification;

(6) The type of containment and the volume, including type and number of storage vessels to be used and the number and type of transportation vehicles, if applicable;

(7) The methods of disposing of any waste by-products;

(8) The status of business, zoning, and other applicable licenses and permits if required by federal, state, and local government entities;

(9) An emergency spill containment plan, including a list of spill containment equipment to be maintained at the used oil processor facility;

(10) Proof of liability insurance or other means of financial responsibility for liabilities that may be incurred in processing or re-refining used oil;

(11) Proof of form and amount of reclamation surety for any facility used in conjunction with transportation or storage of used oil;

(12) Any other information the Director finds necessary to ensure the safe handling of used oil;

(13) A closure plan meeting the requirements of R315-15-

11.

(14) A contingency plan meeting the requirements of R315-15-5.3(b);

(15) Proof of applicant's ownership of the property and facility or, if the property and facility is not owned by the applicant, the owner's written statement acknowledging the activities specified in the application;

(16) Tank certification in accordance with R315-264-190 through 200 for used oil storage tanks at the processor facility; and

(17) A facility piping and instrument drawing certified by a Professional Engineer.

(c) Permit fees. Registration and permitting fees are established under the terms and conditions of Department fee schedule 63J-1-504. A copy of the Division's Fee Schedule is available upon request. Payment of appropriate fees is required prior to issuance of permit approvals and annual used oil handler certificates.

(d) Annual Reporting. Each used oil processing or re-refining facility shall submit an annual report to the Director of its activities during the calendar year. The annual report shall be submitted to the Director no later than March 1 of the year following the reported activities. The annual report shall either be submitted on a form provided by the Director or shall contain the following information:

(1) the EPA identification number, name, and address of the processor/re-refiner facility;

(2) the calendar year covered by the report;

(3) the quantities of used oil accepted for processing/re-refining and the manner in which the used oil is processed/re-refined, including the specific processes employed;

(4) the average daily quantities of used oil processed at the beginning and end of the reporting period;

(5) an itemization of the total amounts of used oil processed or re-refined during the reporting period year specifying the type and amounts of products produced, i.e., lubricating oil, fuel oil, etc.; and

(6) the amounts of used oil prepared for reuse as a lubricating oil, as a fuel, and for other uses, specifying each type of use, the amounts of used oil consumed or used in the process of preparing used oil for reuse, specifying the amounts and types of waste by-products generated including waste, water, and the methods and specific locations utilized for disposal.

(e) Changes in information. The owner or operator of the facility shall notify the Director in writing of any changes in the information submitted to apply for a permit within 20 days of the change.

(f) Used oil processors and re-refiners shall obtain and maintain a current used oil handler certificate in accordance with R315-15-13.8.

13.6 USED OIL BURNERS

(a) On-specification used oil fuel burners. Facilities burning only on-specification used oil fuel are not required to register as used oil burners with the Director for the purpose of R315-15-13.6, if they hold a valid air quality operating order or are exempt under R315-15-2.4.

(b) Off-specification used oil fuel burners

(1) Applicability. The permitting requirements of this section apply to used oil burners who burn off-specification used oil for energy recovery except as specified in R315-15-6.1(a)(1) through (3). A person may not burn off-specification used oil fuel for energy recovery without holding a permit issued by the Director.

(2) Permit application. The application for a permit shall include the following information regarding the facility:

(i) The name and address of the operator;

(ii) The location of the facility;

(iii) The type of containment and type and capacity of storage;

- (iv) The type of burner to be used;
 - (v) The methods of disposing of any waste by-products;
 - (vi) The status of business, zoning, and other applicable licenses and permits required by federal, state, and local governmental entities;
 - (vii) An emergency spill containment plan; including a list of spill containment equipment to be maintained at the used oil processor facility.
 - (viii) Proof of insurance or other means of financial responsibility for liabilities that may be incurred in storing and burning off-specification used oil fuels.
 - (ix) Proof of form and amount of reclamation surety for any facility receiving and burning off-specification used oil.
 - (x) A closure plan meeting the requirements of R315-15-11;
 - (xi) Proof of applicant's ownership of the property and facility or, if the property and facility is not owned by the applicant, the owner's written statement acknowledging the activities specified in the application;
 - (xii) Tank certification in accordance with R315-264-190 through 200 for used oil storage tanks at the processor facility; and
 - (xiii) A facility piping and instrument drawing certified by a Professional Engineer.
- (3) Permit fees. Registration and permitting fees are established under the terms and conditions of Utah Code Annotated 63J-1-504. A copy of the Division's Fee Schedule is available upon request. Payment of appropriate fees is required prior to issuance of permit approvals and annual used oil handler certificates.
- (4) Changes in information. The owner or operator of the facility shall notify the Director in writing of any changes in the information submitted during permit application within 20 days of the change.
- (5) Permits by rule. Any facility permitted by rule is not required to obtain a permit as required by R315-15-13.6(b)(1), but may be required to follow operational practices, as determined by the Director, to minimize risk to human health or the environment. A permit by rule is conditional upon continued compliance with the requirements of R315-15-13.6(b), as determined by the Director. Notwithstanding any other provisions of R315-15-13.6, a hazardous waste incinerator facility that has been issued a final permit under R315-270-1, and that implements the requirements of R315-264-340 through 351, shall be deemed to have an approved off-specification used oil burner permit if that facility meets all of the following conditions:
- (i) It burns off-specification used oil only in devices specified in R315-15-6.2(a);
 - (ii) It stores used oil in the manner described in R315-15-6.5;
 - (iii) It tracks off-specification used oil shipments as described in R315-15-6.6;
 - (iv) It complies with R315-15-6.3 and R315-15-6.7;
 - (v) It modifies its closure plan required under R315-264-110 through 120 (Closure and Post Closure), to include used oil storage and burning devices, taking into account any used oil activities at this facility;
 - (vi) It modifies its financial mechanism or mechanisms required R315-264-140 Through 151 (Financial Requirements), using a mechanism other than a corporate financial test/corporate written guarantee, to reflect the used oil activities at the facility; and
 - (vii) It submits to the Director the information required by R315-15-13.6(b)(2)(i) through (vi), and a one-time declaration that the facility intends to burn off-specification used oil.
- (6) Annual Reporting. Each off-specification used oil burner, including those permitted by rule under R315-15-13.6(b)(5), shall submit an annual report to the Director of their

activities during the calendar year. The annual report shall be submitted to the Director no later than March 1, of the year following the reported activities. The annual report shall either be submitted on a form provided by the Director or shall contain the following information:

- (i) The EPA identification number, name, and address of the burner facility;
 - (ii) The calendar year covered by the report; and
 - (iii) The total amount of used oil burned.
- (c) Off-specification used oil burners shall obtain and maintain a current used oil handler certificate in accordance with R315-15-13.8.

13.7 USED OIL FUEL MARKETERS

(a) Applicability. A person may not act as a used oil fuel marketer, as defined in R315-15-7, without holding a registration number issued by the Director.

(b) General. The application for a registration number shall include the following information regarding the facility acting as a used oil fuel marketer:

- (1) The name and address of the marketer.
- (2) The location of any facilities used by the marketer to collect, transport, process, or store used oil subject to separate permits, or registrations under this section.
- (3) The status of business, zoning, and other applicable licenses and permits required by federal, state, and local governmental entities, including registrations or permits required under this part to collect, process/re-refine, transport, or store used oil.

(4) Sampling and Analysis Plan. Marketers shall develop and follow a written analysis plan describing the procedures that will be used to comply with the analysis requirements of R315-15, including the applicable portions of R315-15-1.2, R315-15-5.4, R315-15-7.3, and R315-15-18. The owner or operator shall keep the plan at the facility. The plan shall address at a minimum the following:

- (i) Specification used oil fuel. The analysis plan shall describe how the marketer will comply with R315-15-1.2, R315-15-5.6, and R315-15-7.3, as applicable.
- (ii) Analytical methods. The plan shall specify the preparation and analytical methods for each parameter.
- (iii) PCBs. The analysis plan shall describe how the marketer will comply with R315-15-18.
- (iv) Generator knowledge. The plan shall describe the requirements for generator knowledge, if applicable.
- (v) Sample Quality Control. The plan shall specify the quality control parameters and acceptance limits.
- (vi) Rebuttable presumption for used oil. The analysis plan shall describe how the marketer will comply with R315-15-1.1(b)(ii) and R315-15-5.4, if applicable.
- (vii) Sampling. The analysis plan shall describe the sampling protocol used to obtain representative samples, including:

(A) Sampling methods. The marketer shall use one of the sampling methods in R315-261 Appendix I, or a method shown to be equivalent under R315-260-21.

(B) Sample frequency. The plan shall specify the frequency of sampling to be performed, and whether the analysis will be performed on site or off site.

(c) Registration fees. Registration and permitting fees are established under the terms and conditions of Utah Code Annotated 63J-1-504. A copy of the Division's Fee Schedule is available upon request. Payment of appropriate fees is required prior to issuance of registration numbers and annual used oil handler certificates.

(d) A person who acts as used oil fuel marketer shall annually obtain a used oil handler certificate in accordance with R315-15-13.8. A used oil fuel marketer shall not operate without a used oil handler certificate.

(e) Changes in information. The owner or operator of the

facility shall notify the Director in writing of any changes in the information submitted to apply for a registration within 20 days of the change.

13.8 USED OIL HANDLER CERTIFICATES

(a) Applicability. As well as obtaining permits and registration described in R315-15-13.4 through 13.7, a person shall not act as a used oil transporter, operator of a transfer facility, processor/re-refiner, off-specification burner, or marketer without applying for, receiving, and maintaining a current used oil handler certificate issued by the Director for each applicable activity. Each used oil permit and marketer registration described in R315-15-13.4 through 13.7 above requires a separate used oil handler certificate.

(b) General. Each application for a used oil handler certificate shall include the following information:

- (1) business name;
- (2) address to include:
 - (i) mailing address; and
 - (ii) site address if different from mailing address
- (3) telephone number
- (4) name of business owner;
- (5) name of business operator;
- (6) permit/registration number; and
- (7) type of permit/registration number (i.e., processor, transporter, transfer facility, off-specification burner, or marketer).

(c) Changes in information. A used oil handler certificate holder shall notify the Director of any changes in the information provided in Subsection R315-15-13.8(b) within 20 days of implementation of the change.

(d) A used oil handler certificate will be issued to an applicant following the:

- (1) completion and approval of the application required by R315-15-13.8(a); and
- (2) payment of the fee required by the Annual Appropriations Act.

(e) A used oil handler certificate is not transferable and shall be valid January 1 through December 31 of the year issued. The certificate shall become void if the permit or registration associated with the used oil activity described in the certificate, in accordance with R315-15-13.8(b)(6) in the application, is revoked under R315-15-15.2 or if the Director, upon the written request of the permittee or registration holder, cancels the certificate.

(f) The certificate registration fee shall be paid prior to operation within any calendar year.

R315-15-14. DIYer Reimbursement.

14.1 DIYER USED OIL COLLECTION CENTER INCENTIVE PAYMENT APPLICABILITY

(a) The Director shall pay a quarterly recycling fee incentive to registered DIYer used oil collection centers and curbside programs approved by the Director for each gallon of used oil collected from DIYer used oil generators, and transported by a permitted used oil transporter to a permitted used oil processor/re-refiner, burner, registered marketer or burned in accordance with R315-15-2.4(b).

(b) All registered DIYer used oil collection centers can qualify for a recycling incentive payment of up to \$0.16 per gallon, subject to availability of funds and the priorities of Utah Code Annotated 19-6-720.

14.2 REIMBURSEMENT PROCEDURES

In order for DIYer collection centers to qualify for the recycling incentive payment they are required to comply with the following procedures.

(a) Submit a copy of all records and receipts of DIYer and farmer, as defined in R315-15-2.1(a)(4), used oil collected during the quarter for which the reimbursement is requested. These records shall be submitted within 30 days following the

end of the calendar quarter in which the DIYer oil was collected and for which reimbursement is requested.

(b) Reimbursements will be issued by the Director within 30 days following the report filing period.

(c) Reports received later than 30 days after the end of the calendar quarter for which reimbursement is requested will be paid during the next quarterly reimbursement period.

(d) Any reimbursement requests outside the timeframe outlined in R315-15-14.2(a) will not be granted unless approved by the Director.

R315-15-15. Issuance, Renewal, and Revocation of Permits and Registrations.

15.1 PUBLIC COMMENTS AND HEARING.

(a) The Director shall:

(1) determine if the permit application or modification request is complete and meets all requirements of R315-15-13;

(2) publish notice of the proposed permit in a newspaper of general circulation in the state and also in a newspaper of general circulation in the county in which the proposed permitted facility is located;

(3) provide a 15-day public comment period from the date of publication to allow the public time to submit written comments;

(4) consider submitted public comments received within the comment period; and

(5) send a written decision to the applicant and to persons submitting comments,

(b) The Director's decision under R315-15-15.1(a) may be appealed in accordance with Utah Administrative Code R305-7.

(c) Duration of Permits. Used oil permits shall be effective for a fixed term not to exceed ten years. Any Permittee holding a permit issued on or before January 1, 2005 who wants to continue operating shall submit an application for a new permit not later than 180 days after January 1, 2015. The term of a permit shall not be extended by modification to the permit.

(d) The conditions of an expired permit continue in force until the effective date of a new permit if:

(1) The permittee has submitted a timely application under R315-15-13, at least 180 days prior to the expiration date of the current permit. The permit application shall contain all the materials required by R315-15-13.

(2) The Director, through no fault of the permittee, does not issue a new permit with an effective date on or before the expiration date of the previous permit (for example, when issuance is impracticable due to time or resource constraints).

(e) Effect. Permits continued under this section remain fully effective and enforceable.

(f) Enforcement. When the permittee is not in compliance with the conditions of the expiring or expired permit, the Director may choose to do any or all of the following:

(1) Initiate enforcement action based upon the permit that has been continued;

(2) Issue a notice of intent to deny the new permit under R315-15-15.2. If the permit is denied, the owner or operator is required to cease the activities authorized by the continued permit or be subject to enforcement action for operating without a permit;

(3) Issue a new permit under R315-15-15.2 with appropriate conditions;

(4) Take other actions authorized by these rules

(g) Five-Year Review of Permit. Each used oil permit, including the costs of closure and post closure care issued under R315-15-13, shall be reviewed by the Director five years after the permit's issuance, or when the Director determines that a permit requires review and modification.

15.2 MODIFICATION AND REVOCATION OF PERMITS, REGISTRATIONS AND HANDLER CERTIFICATES.

(a) A permit may be considered for modification, renewal, or termination at the request of any interested person, including the permittee, or upon the Director's initiative as a result of new information or changes in statutes or rules. Requests for modification, reissuance, or termination shall be submitted in writing to the Director and shall contain facts or reasons supporting the request. The permit modification requests shall not be implemented until approval of the Director.

Violation of any permit or registration conditions or failure to comply with any provisions of the applicable statutes and rules, shall be grounds for imposing statutory sanctions, including denial of an application for permit, registration, or used oil handler certificate.

(b) Request for agency action. The owner or operator of a facility may contest an order associated with modification, renewal, or termination in accordance with Utah Administrative Code R305-7.

R315-15-16. Grants.

16.1 STATUTORY AUTHORITY.

Utah Code Annotated 19-6-720 authorizes the Division of Waste Management and Radiation Control to award grants, as funds are available, for the following:

(a) Used oil collection centers; and

(b) Curbside used oil collection programs, including costs of retrofitting trucks, curbside containers, and other costs of collection programs.

16.2 ELIGIBILITY AND APPLICATION.

(a) The establishment of new or the enhancement of existing used oil collection centers or curbside collection programs that address the proper management of used lubricating oil may be eligible for grant assistance.

(b) A Used Oil Recycling Block Grant Package, published by the Director, shall be completed and submitted to the Director for consideration.

16.3 LIMITATIONS.

(a) The grantee must commit to perform the permitted used oil handling activity for a minimum of two years.

(b) If the two-year commitment is not fulfilled, the grantee may be required to repay all or a portion of the grant amount.

R315-15-17. Wording of Financial Assurance Mechanisms.

17.1 APPLICABILITY

R315-15-17 presents the standard wording forms to be used for the financial assurance mechanisms found in R315-15-12. The following forms are hereby incorporated by reference and are available at the Division of Waste Management and Radiation Control located at 195 North 1950 West, Salt Lake City, Utah, during normal business hours or on the Division's web site, <http://www.hazardouswaste.utah.gov/>.

(a) The Division requires that the forms described in R315-15-17.2 through R315-15-17.14 shall be used for all financial assurance filings and shall be signed in duplicate original documents. The wording of the forms shall be identical to the wording specified in R315-15-17.2 through R315-15-17.14.

(b) The Director may substitute new wording for the wording found in any of the financial assurance mechanism forms when such language changes are necessary to conform to applicable financial industry changes, when industry-wide consensus language changes are submitted to the Director.

17.2 TRUST AGREEMENTS

The trust agreement for a trust fund must be worded as found in the Trust Agreement Form approved by the Director.

17.3 SURETY BOND GUARANTEEING PAYMENT INTO A STANDBY TRUST AGREEMENT TRUST FUND

The surety bond guaranteeing payment into a standby trust agreement trust fund must be worded as found in the Surety Bond Guaranteeing Payment into a Standby Trust Agreement

Trust Fund Form approved by the Director.

17.4 IRREVOCABLE STANDBY LETTER OF CREDIT WITH STANDBY TRUST AGREEMENT

The letter of credit must be worded as found in the Irrevocable Standby Letter of Credit with Standby Trust Agreement Form approved by the Director.

17.5 UTAH USED OIL POLLUTION INSURANCE ENDORSEMENT FOR CLEANUP AND CLOSURE

The insurance endorsement of cleanup and closure must be worded as found in the Utah Used Oil Pollution Insurance Endorsement for Cleanup and Closure Form approved by the Director.

17.6 UTAH USED OIL TRANSPORTER POLLUTION LIABILITY ENDORSEMENT FOR SUDDEN OCCURRENCE

The used oil transporter pollution liability endorsement for sudden occurrence must be worded as found in the Utah Used Oil Transporter Pollution Liability Endorsement for Sudden Occurrence Form approved by the Director.

17.7 UTAH USED OIL POLLUTION LIABILITY ENDORSEMENT FOR SUDDEN OCCURRENCE

The used oil pollution liability endorsement for sudden occurrence for permitted facilities other than permitted transporters must be worded as found in the Utah Used Oil Pollution Liability Endorsement for Sudden Occurrence Form approved by the Director.

17.8 UTAH USED OIL POLLUTION LIABILITY ENDORSEMENT FOR NON-SUDDEN OCCURRENCE

The used oil pollution liability endorsement for non-sudden occurrence must be worded as found in the Utah Used Oil Pollution Liability Endorsement Non-Sudden Occurrence Form approved by the Director.

17.9 UTAH USED OIL POLLUTION LIABILITY ENDORSEMENT FOR COMBINED SUDDEN AND NON-SUDDEN OCCURRENCES

The used oil pollution liability endorsement combined for sudden and non-sudden occurrence must be worded as found in the Utah Used Oil Pollution Liability Endorsement for Combined Sudden and Non-Sudden Occurrences Form approved by the Director.

17.10 LETTER OF CREDIT FOR THIRD-PARTY DAMAGES FROM ENVIRONMENTAL POLLUTION LIABILITY WITH OPTIONAL STANDBY TRUST AGREEMENT TO BE USED BY TRANSFER/PROCESSOR/RE-REFINER/OFF-SPECIFICATION BURNER FACILITY

The letter of credit must be worded as found in the Letter of Credit for Third Party Damages from Environmental Pollution Liability with Optional Standby Trust Agreement to be used by Transfer/Processor/Re-refiner/Off-specification Burner Facility Form approved by the Director.

17.11 PAYMENT BOND FOR THIRD-PARTY DAMAGES FROM ENVIRONMENTAL POLLUTION LIABILITY TO BE USED BY TRANSFER/PROCESSOR/RE-REFINER/OFF-SPECIFICATION BURNER FACILITY

A surety bond must be worded as found in the Payment Bond for Third Party Damages from Environmental Pollution Liability to be used by Transfer/Processor/Re-refiner/Off-specification burner Facility Form approved by the Director.

17.12 TRUST AGREEMENT FOR THIRD-PARTY DAMAGES FROM ENVIRONMENTAL POLLUTION LIABILITY TO BE USED BY TRANSFER/PROCESSOR/RE-REFINER/OFF-SPECIFICATION BURNER FACILITY

A trust agreement must be worded as found in the Trust Agreement for Third Party Damages from Environmental Pollution Liability to be used by Transfer/Processor/Re-refiner/Off-specification Burner Facility Form approved by the Director.

17.13 STANDBY TRUST AGREEMENT ASSOCIATED

WITH THIRD-PARTY DAMAGES FROM ENVIRONMENTAL POLLUTION LIABILITY REQUIRING A STANDBY TRUST AGREEMENT TO BE USED BY TRANSFER/PROCESSOR/RE-REFINER/OFF-SPECIFICATION BURNER FACILITY

A standby trust agreement must be worded as found in the Standby Trust Agreement Associated with Third Party Damages from Environmental Pollution Liability Requiring Standby Trust Agreement to be used by Transfer/Processor/Re-refiner/Off-specification Burner Facility Form approved by the Director.

17.14 STANDBY TRUST AGREEMENT, OTHER THAN LIABILITY, FOR TRANSFER/PROCESSOR/RE-REFINER/OFF-SPECIFICATION BURNER FACILITY

The standby trust agreement for a trust fund must be worded as found in the Standby Trust Agreement, other than Liability for Transfer/Processor/Re-refiner/Off-specification Burner Facility Form approved by the Director.

R315-15-18. Polychlorinated Biphenyls (PCBs).

(a) Used oil containing polychlorinated biphenyl (PCB) concentrations of 50 ppm and above is subject to TSCA regulations in 40 CFR 761. Used oil containing PCB concentrations greater than or equal to 2 ppm but less than 50 ppm is subject to both R315-15 and 40 CFR 761.

(b) Used oil transporter PCB testing. Used oil transporters shall determine the PCB content of used oil being transported is less than 50 ppm prior to transferring the oil into the transporter's vehicles. The transporter shall make this determination as follows:

(1) Used dielectric oil. Dielectric oil used in transformers and other high voltage devices shall be certified to be less than 50 ppm prior to loading to the transporter's vehicle through laboratory testing following the procedures described in R315-15-18(d).

(2) Other used oils shall be certified to be less than 50 ppm prior to transfer through either:

(A) Laboratory testing following the procedures described in R315-15-18(d) below, or

(B) Written certification from the generator that the PCB content of the used oil is less than 50 ppm based on manufacturing specifications and process knowledge.

(c) Used oil marketer PCB testing. To ensure that used oil destined to be burned for energy recovery is not a regulated waste under the TSCA regulations, used oil fuel marketers shall determine whether the PCB content of used oil being burned for energy recovery is below 2 ppm. A marketer shall make this determination in a manner consistent with the used oil marketer's sampling and analysis plan.

(d) Laboratory testing for PCBs. Used oil testing for total PCBs shall include the following Aroclors: 1016, 1221, 1232, 1242, 1248, 1254, and 1260. If plasticizers (used in polyvinyl chloride plastic, neoprene, chlorinated rubbers, laminating adhesives, sealants and caulk and joint compounds etc.) are present, then the used oil shall also be analyzed for Aroclors 1262 and 1268. If other Aroclors are known or suspected to be present, then the used oil shall be analyzed for those additional Aroclors.

(e) The following Utah Certified Laboratory SW-846 methodologies shall be used for PCBs:

(1) Preparation method 3580A, clean up method 3665A, and analytical method 8082A.

(2) Individual Aroclors shall be reported with a reporting limit of 1 ppm or less.

(3) If the source of the PCBs is known to be an Aroclor, and the Aroclor is unlikely to be significantly altered in homologue composition such as weathering, Aroclors listed in R315-15-18(d) shall be reported. Analytical results from all 209 individual congeners or ten homologue groups shall be submitted for any sample that has an altered homologue

composition such as weathering unless prior approval is obtained from the Director.

KEY: hazardous waste, used oil

August 31, 2017

Notice of Continuation March 10, 2016

19-6-704

R315. Environmental Quality, Waste Management and Radiation Control, Waste Management.

R315-260. Hazardous Waste Management System.

R315-260-1. Purpose, scope, and applicability.

(a) Rule R315-260 provides definitions of terms, general standards, and overview information applicable to Rules R315-260 through 265 and 268.

R315-260-2. Availability of Information and Confidentiality of Information.

(a) Any information provided to The Director under Rules R315-15 and 101; Rules R315-260 through 266, 268, 270 and 273 will be made available to the public to the extent and in the manner authorized by Sections 63G-2-101 through 901.

(b) Except as provided under Subsection R315-260-2(c), any person who submits information to the Director in accordance with Rules R315-15 and 101; Rules R315-260 through 266, 268, 270 and 273 may assert a claim of business confidentiality covering part or all of that information by following the procedures set forth in Section 63G-2-309. Information covered by such a claim shall be disclosed by the Director only to the extent, and by means of the procedures, set forth Sections 63G-2-101 through 901 except that information required by Subsection R315-262-53(a) and Subsection R315-262-83 that is submitted to EPA in a notification of intent to export a hazardous waste shall be provided to the U.S. Department of State and the appropriate authorities in the transit and receiving or importing countries regardless of any claims of confidentiality. However, if no claim under Sections 63G-2-101 through 804 accompanies the information when it is received by the Director, it may be made available to the public without further notice to the person submitting it.

(c)(1) After August 6, 2014, no claim of business confidentiality may be asserted by any person with respect to information entered on a Hazardous Waste Manifest, EPA Form 8700-22, a Hazardous Waste Manifest Continuation Sheet, EPA Form 8700-22A, or an electronic manifest format that may be prepared and used in accordance with Subsection R315-262-20(a)(3).

(2) EPA shall make any electronic manifest that is prepared and used in accordance with Subsection R315-262-20(a)(3), or any paper manifest that is submitted to the system under Subsection R315-264-71(a)(6) or Subsection 40 CFR 265.71(a)(6), which is adopted by reference, available to the public under Section R315-260-2 when the electronic or paper manifest is a complete and final document. Electronic manifests and paper manifests submitted to the system are considered by EPA to be complete and final documents and publicly available information after 90 days have passed since the delivery to the designated facility of the hazardous waste shipment identified in the manifest.

R315-260-4. References to Other Statutes and Regulations.

(a) Federal statutes and regulations that are cited in Rules R315-260 through 266, 268, 270, 273 and 124 that are not specifically adopted by reference shall be used as guidance in interpreting the Rules R315-260 through 266, 268, 270, 273 and 124.

(b) Any reference to the "Department of Transportation" or "DOT" in Rules R315-260 through 266, 268, 270, 273 and 124 shall mean the "U.S. Department of Transportation".

R315-260-5. Inspections.

Any duly authorized officer, employee or representative of the Department or the Director may, in accordance with Section 19-6-109, enter upon and inspect any property, premise, or place on or at which solid or hazardous wastes are generated, transported, stored, treated or disposed of for the purpose of ascertaining the compliance with Rules R315-15, R315-101,

R315-124, R315-260 through 266, R315-268, R315-270, and R315-273. Inspectors may also inspect any waste and obtain samples thereof, including samples from any vehicle in which wastes are being transported or samples of any containers or labels. Inspectors may also have access to and the right to make copies of any records, either in hard copy or electronic format, relating to compliance with Rules R315-15, R315-101, R315-124, R315-260 through 266, R315-268, R315-270, and R315-273. Inspectors may also take photographs and make video and audio recordings while conducting authorized activities.

R315-260-10. Definitions.

(a) Terms used in Rules R315-15, R315-260 through 266, R315-268, R315-270, R315-273, and Rule R315-101 are defined in Sections 19-1-103 and 19-6-102.

(b) Terms used in Rule R315-15 are also defined in Sections 19-6-703 and 19-6-706(b).

(c) Additional terms used in Rules R315-260 through 266, R315-268, R315-270, R315-273, and Rule R315-101 are defined as follows:

(1) "Above ground tank" means a device meeting the definition of "tank" in Section R315-260-10 and that is situated in such a way that the entire surface area of the tank is completely above the plane of the adjacent surrounding surface and the entire surface area of the tank, including the tank bottom, is able to be visually inspected.

(2) "Acute hazardous waste" means hazardous wastes that meet the listing criteria in Subsection R315-261-11(a)(2) and therefore are either listed in Section R315-261-31 with the assigned hazard code of (H) or are listed in Subsection R315-261-33(e).

(3) "Active life" of a facility means the period from the initial receipt of hazardous waste at the facility until the Director receives certification of final closure.

(4) "Active portion" means that portion of a facility where treatment, storage, or disposal operations are being or have been conducted after November 19, 1980 and which is not a closed portion. See also "closed portion" and "inactive portion."

(5) "Approved hazardous waste management facility" or "approved facility" means a hazardous waste treatment, storage, or disposal facility which has received an EPA permit in accordance with federal requirements, has been approved under Section 19-6-108 and Rule R315-270, or has been permitted or approved under any other EPA authorized hazardous waste state program.

(6) "Ancillary equipment" means any device including, but not limited to, such devices as piping, fittings, flanges, valves, and pumps, that is used to distribute, meter, or control the flow of hazardous waste from its point of generation to a storage or treatment tank(s), between hazardous waste storage and treatment tanks to a point of disposal onsite, or to a point of shipment for disposal off-site.

(7) "Aquifer" means a geologic formation, group of formations, or part of a formation capable of yielding a significant amount of ground water to wells or springs.

(8) "Authorized representative" means the person responsible for the overall operation of a facility or an operational unit, i.e., part of a facility, e.g., the plant manager, superintendent or person of equivalent responsibility.

(9) "Battery" means a device consisting of one or more electrically connected electrochemical cells which is designed to receive, store, and deliver electric energy. An electrochemical cell is a system consisting of an anode, cathode, and an electrolyte, plus such connections, electrical and mechanical, as may be needed to allow the cell to deliver or receive electrical energy. The term battery also includes an intact, unbroken battery from which the electrolyte has been removed.

(10) "Boiler" means an enclosed device using controlled

flame combustion and having the following characteristics:

(i)(A) The unit shall have physical provisions for recovering and exporting thermal energy in the form of steam, heated fluids, or heated gases; and

(B) The unit's combustion chamber and primary energy recovery section(s) shall be of integral design. To be of integral design, the combustion chamber and the primary energy recovery section(s), such as waterwalls and superheaters, shall be physically formed into one manufactured or assembled unit. A unit in which the combustion chamber and the primary energy recovery section(s) are joined only by ducts or connections carrying flue gas is not integrally designed; however, secondary energy recovery equipment, such as economizers or air preheaters, need not be physically formed into the same unit as the combustion chamber and the primary energy recovery section. The following units are not precluded from being boilers solely because they are not of integral design: process heaters, units that transfer energy directly to a process stream, and fluidized bed combustion units; and

(C) While in operation, the unit shall maintain a thermal energy recovery efficiency of at least 60 percent, calculated in terms of the recovered energy compared with the thermal value of the fuel; and

(D) The unit shall export and utilize at least 75 percent of the recovered energy, calculated on an annual basis. In this calculation, no credit shall be given for recovered heat used internally in the same unit. Examples of internal use are the preheating of fuel or combustion air, and the driving of induced or forced draft fans or feedwater pumps; or

(ii) The unit is one which the Board has determined, on a case-by-case basis, to be a boiler, after considering the standards in Section R315-260-32

(11) "Carbon dioxide stream" means carbon dioxide that has been captured from an emission source, e.g., power plant, plus incidental associated substances derived from the source materials and the capture process, and any substances added to the stream to enable or improve the injection process.

(12) "Carbon regeneration unit" means any enclosed thermal treatment device used to regenerate spent activated carbon.

(13) "Cathode ray tube" or "CRT" means a vacuum tube, composed primarily of glass, which is the visual or video display component of an electronic device. A used, intact CRT means a CRT whose vacuum has not been released. A used, broken CRT means glass removed from its housing or casing whose vacuum has been released.

(14) "Central accumulation area" means any on-site hazardous waste accumulation area with hazardous waste accumulating in units subject to either Section R315-262-16, for small quantity generators, or Section R315-262-17, for large quantity generators. A central accumulation area at an eligible academic entity that chooses to operate under Sections R315-262-200 through 216 is also subject to Section R315-262-211 when accumulating unwanted material or hazardous waste, or both.

(15) "Certification" means a statement of professional opinion based upon knowledge and belief.

(16) "Closed portion" means that portion of a facility which an owner or operator has closed in accordance with the approved facility closure plan and all applicable closure requirements. See also "active portion" and "inactive portion".

(17) "Component" means either the tank or ancillary equipment of a tank system.

(18) "Confined aquifer" means an aquifer bounded above and below by impermeable beds or by beds of distinctly lower permeability than that of the aquifer itself; an aquifer containing confined ground water.

(19) "Contained" means held in a unit, including a land-based unit as defined in R315-260-10, that meets the following

criteria:

(i) The unit is in good condition, with no leaks or other continuing or intermittent unpermitted releases of the hazardous secondary materials to the environment, and is designed, as appropriate for the hazardous secondary materials, to prevent releases of hazardous secondary materials to the environment. Unpermitted releases are releases that are not covered by a permit, such as a permit to discharge to water or air, and may include, but are not limited to, releases through surface transport by precipitation runoff, releases to soil and groundwater, wind-blown dust, fugitive air emissions, and catastrophic unit failures;

(ii) The unit is properly labeled or otherwise has a system, such as a log, to immediately identify the hazardous secondary materials in the unit; and

(iii) The unit holds hazardous secondary materials that are compatible with other hazardous secondary materials placed in the unit and is compatible with the materials used to construct the unit and addresses any potential risks of fires or explosions.

(iv) Hazardous secondary materials in units that meet the applicable requirements of Rules R315-264 or 265 are presumptively contained.

(20) "Container" means any portable device in which a material is stored, transported, treated, disposed of, or otherwise handled.

(21) "Containment building" means a hazardous waste management unit that is used to store or treat hazardous waste under the provisions of Subsections R315-264-1100 through 1102 or 40 CFR 265.1100 through 1102, which are adopted and incorporated by reference.

(22) "Contingency plan" means a document setting out an organized, planned, and coordinated course of action to be followed in case of a fire, explosion, or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment.

(23) "Corrosion expert" means a person who, by reason of his knowledge of the physical sciences and the principles of engineering and mathematics, acquired by a professional education and related practical experience, is qualified to engage in the practice of corrosion control on buried or submerged metal piping systems and metal tanks. Such a person shall be certified as being qualified by the National Association of Corrosion Engineers (NACE) or be a registered professional engineer who has certification or licensing that includes education and experience in corrosion control on buried or submerged metal piping systems and metal tanks.

(24) "CRT collector" means a person who receives used, intact CRTs for recycling, repair, resale, or donation.

(25) "CRT glass manufacturer" means an operation or part of an operation that uses a furnace to manufacture CRT glass.

(26) "CRT processing" means conducting all of the following activities:

(i) Receiving broken or intact CRTs; and

(ii) Intentionally breaking intact CRTs or further breaking or separating broken CRTs; and

(iii) Sorting or otherwise managing glass removed from CRT monitors.

(27) "Designated facility" means:

(i) A hazardous waste treatment, storage, or disposal facility which:

(A) Has received a permit, or interim status, in accordance with the requirements of Rule R315-270 and 124;

(B) Has received a permit, or interim status, from a State authorized in accordance with 40 CFR 271; or

(C) Is regulated under Subsection R315-261-6(c)(2) or Section R315-266-70; and

(D) That has been designated on the manifest by the generator pursuant to Section R315-262-20.

(ii) "Designated facility" also means a generator site designated on the manifest to receive its waste as a return

shipment from a facility that has rejected the waste in accordance with Subsections R315-264-72(f) or 40 CFR 265.72(f), which is adopted and incorporated by reference.

(iii) If a waste is destined to a facility in an authorized State which has not yet obtained authorization to regulate that particular waste as hazardous, then the designated facility shall be a facility allowed by the receiving State to accept such waste.

(28) "Destination facility" means a facility that treats, disposes of, or recycles a particular category of universal waste, except those management activities described in Subsection R315-273-13(a) and (c) and Section R315-273-33. A facility at which a particular category of universal waste is only accumulated, is not a destination facility for purposes of managing that category of universal waste.

(29) "Dike" means an embankment or ridge of either natural or man-made materials used to prevent the movement of liquids, sludges, solids, or other materials.

(30) "Dioxins and furans (D/F)" means tetra, penta, hexa, hepta, and octa-chlorinated dibenzo dioxins and furans.

(31) "Discharge" or "hazardous waste discharge" means the accidental or intentional spilling, leaking, pumping, pouring, emitting, emptying, or dumping of hazardous waste into or on any land or water.

(32) "Disposal facility" means a facility or part of a facility at which hazardous waste is intentionally placed into or on any land or water, and at which waste will remain after closure. The term disposal facility does not include a corrective action management unit into which remediation wastes are placed.

(33) "Division" means the Division of Waste Management and Radiation Control.

(34) "Drip pad" is an engineered structure consisting of a curbed, free-draining base, constructed of non-earthen materials and designed to convey preservative kick-back or drippage from treated wood, precipitation, and surface water run-on to an associated collection system at wood preserving plants.

(35) "Elementary neutralization unit" means a device which:

(i) Is used for neutralizing wastes that are hazardous only because they exhibit the corrosivity characteristic defined in Section R315-261-22, or they are listed in Sections R315-261-30 through 35 only for this reason; and

(ii) Meets the definition of tank, tank system, container, transport vehicle, or vessel in Sections R315-260-10.

(36) "Electronic manifest, or e-Manifest" means the electronic format of the hazardous waste manifest that is obtained from EPA's national e-Manifest system and transmitted electronically to the system, and that is the legal equivalent of EPA Forms 8700-22, Manifest, and 8700-22A, Continuation Sheet.

(37) "Electronic Manifest System, or e-Manifest System" means EPA's national information technology system through which the electronic manifest may be obtained, completed, transmitted, and distributed to users of the electronic manifest and to regulatory agencies.

(38) "EPA hazardous waste number" means the number assigned by EPA to each hazardous waste listed in Sections R315-261-30 through 35 and to each characteristic identified in Sections R315-261-20 through 24.

(39) "EPA identification number" means the number assigned by EPA to each generator, transporter, and treatment, storage, or disposal facility.

(40) "EPA region" means the states and territories found in any one of the following ten regions:

(i) Region I-Maine, Vermont, New Hampshire, Massachusetts, Connecticut, and Rhode Island.

(ii) Region II-New York, New Jersey, Commonwealth of Puerto Rico, and the U.S. Virgin Islands.

(iii) Region III-Pennsylvania, Delaware, Maryland, West Virginia, Virginia, and the District of Columbia.

(iv) Region IV-Kentucky, Tennessee, North Carolina, Mississippi, Alabama, Georgia, South Carolina, and Florida.

(v) Region V-Minnesota, Wisconsin, Illinois, Michigan, Indiana and Ohio.

(vi) Region VI-New Mexico, Oklahoma, Arkansas, Louisiana, and Texas.

(vii) Region VII-Nebraska, Kansas, Missouri, and Iowa.

(viii) Region VIII-Montana, Wyoming, North Dakota, South Dakota, Utah, and Colorado.

(ix) Region IX-California, Nevada, Arizona, Hawaii, Guam, American Samoa, Commonwealth of the Northern Mariana Islands.

(x) Region X-Washington, Oregon, Idaho, and Alaska.

(41) "Equivalent method" means any testing or analytical method approved by the Director under Sections R315-260-20 and 21.

(42) "Existing hazardous waste management (HWM) facility" or "existing facility" means a facility which was in operation or for which construction commenced on or before November 19, 1980. A facility has commenced construction if:

(i) The owner or operator has obtained the Federal, State and local approvals or permits necessary to begin physical construction; and either

(ii)(A) A continuous on-site, physical construction program has begun; or

(B) The owner or operator has entered into contractual obligations-which cannot be cancelled or modified without substantial loss-for physical construction of the facility to be completed within a reasonable time.

(43) "Existing portion" means that land surface area of an existing waste management unit, included in the original Part A permit application, on which wastes have been placed prior to the issuance of a permit.

(44) "Existing tank system" or "existing component" means a tank system or component that is used for the storage or treatment of hazardous waste and that is in operation, or for which installation has commenced on or prior to July 14, 1986, or December 16, 1988 for purposes of implementing the non-HSWA requirements of the tank regulations as promulgated by EPA on July 14, 1986, 51 FR 25470, as they have been incorporated into the corresponding rules of R315. A non-HSWA existing tank system or non-HSWA tank component is one which does not implement any of the requirements of the federal Hazardous and Solid Waste Amendments of 1984 (HSWA) as identified in Table 1 of 40 CFR 271.1. Installation shall be considered to have commenced if the owner or operator has obtained all Federal, State, and local approvals or permits necessary to begin physical construction of the site or installation of the tank system and if either:

(i) a continuous on-site physical construction or installation program has begun; or

(ii) the owner or operator has entered into contractual obligations, which cannot be canceled or modified without substantial loss, for physical construction of the site or installation of the tank system to be completed within a reasonable time.

(45) "Facility" means:

(i) All contiguous land, and structures, other appurtenances, and improvements on the land, used for treating, storing, or disposing of hazardous waste, or for managing hazardous secondary materials prior to reclamation. A facility may consist of several treatment, storage, or disposal operational units, e.g., one or more landfills, surface impoundments, or combinations of them.

(ii) For the purpose of implementing corrective action under Section R315-264-101, all contiguous property under the control of the owner or operator seeking a permit under Section 19-6-108. This definition also applies to facilities implementing corrective action under Section R315-263-31 and Rule R315-

101.

(iii) Notwithstanding Subsection R315-1-10(43)(ii), a remediation waste management site is not a facility that is subject to Section R315-264-101, but is subject to corrective action requirements if the site is located within such a facility.

(46) "Federal agency" means any department, agency, or other instrumentality of the Federal Government, any independent agency or establishment of the Federal Government including any Government corporation, and the Government Printing Office.

(47) "Federal, State and local approvals or permits necessary to begin physical construction" means permits and approvals required under Federal, State or local hazardous waste control statutes, regulations or ordinances.

(48) "Final closure" means the closure of all hazardous waste management units at the facility in accordance with all applicable closure requirements so that hazardous waste management activities under Rules R315-264 and 265 are no longer conducted at the facility unless subject to the provisions in Section R315-262-34.

(49) "Food-chain crops" means tobacco, crops grown for human consumption, and crops grown for feed for animals whose products are consumed by humans.

(50) "Free liquids" means liquids which readily separate from the solid portion of a waste under ambient temperature and pressure.

(51) "Freeboard" means the vertical distance between the top of a tank or surface impoundment dike, and the surface of the waste contained therein.

(52) "Generator" means any person, by site, whose act or process produces hazardous waste identified or listed in Rule R315-261 or whose act first causes a hazardous waste to become subject to regulation.

(53) "Ground water" means water below the land surface in a zone of saturation.

(54) "Hazard class" means:

(i) The DOT hazard class identified in 49 CFR 172; and

(ii) If the DOT hazard class is "OTHER REGULATED MATERIAL," ORM, the EPA hazardous waste characteristic exhibited by the waste and identified in Sections R315-261-20 through 24.

(55) "Hazardous secondary material" means a secondary material, e.g., spent material, by-product, or sludge, that, when discarded, would be identified as hazardous waste under Rule R315-261.

(56) "Hazardous secondary material generator" means any person whose act or process produces hazardous secondary materials at the generating facility. For purposes of Subsection R315-260-10(c)(58), "generating facility" means all contiguous property owned, leased, or otherwise controlled by the hazardous secondary material generator. For the purposes of Subsections R315-261-2(a)(2)(ii) and R315-261-4(a)(23), a facility that collects hazardous secondary materials from other persons is not the hazardous secondary material generator.

(57) "Hazardous waste constituent" means a constituent that caused the Board to list the hazardous waste in Sections R315-261-30 through 35, or a constituent listed in table 1 of Section R315-261-24.

(58) "Hazardous waste management unit" is a contiguous area of land on or in which hazardous waste is placed, or the largest area in which there is significant likelihood of mixing hazardous waste constituents in the same area. Examples of hazardous waste management units include a surface impoundment, a waste pile, a land treatment area, a landfill cell, an incinerator, a tank and its associated piping and underlying containment system and a container storage area. A container alone does not constitute a unit; the unit includes containers and the land or pad upon which they are placed.

(59) "In operation" refers to a facility which is treating,

storing, or disposing of hazardous waste.

(60) "Inactive portion" means that portion of a facility which is not operated after November 19, 1980. See also "active portion" and "closed portion".

(61) "Incinerator" means any enclosed device that:

(i) Uses controlled flame combustion and neither meets the criteria for classification as a boiler, sludge dryer, or carbon regeneration unit, nor is listed as an industrial furnace; or

(ii) Meets the definition of infrared incinerator or plasma arc incinerator.

(62) "Incompatible waste" means a hazardous waste which is unsuitable for:

(i) Placement in a particular device or facility because it may cause corrosion or decay of containment materials, e.g., container inner liners or tank walls; or

(ii) Commingling with another waste or material under uncontrolled conditions because the commingling might produce heat or pressure, fire or explosion, violent reaction, toxic dusts, mists, fumes, or gases, or flammable fumes or gases.

(63) "Individual generation site" means the contiguous site at or on which one or more hazardous wastes are generated. An individual generation site, such as a large manufacturing plant, may have one or more sources of hazardous waste but is considered a single or individual generation site if the site or property is contiguous.

(64) "Industrial furnace" means any of the following enclosed devices that are integral components of manufacturing processes and that use thermal treatment to accomplish recovery of materials or energy:

(i) Cement kilns;

(ii) Lime kilns;

(iii) Aggregate kilns;

(iv) Phosphate kilns;

(v) Coke ovens;

(vi) Blast furnaces;

(vii) Smelting, melting and refining furnaces, including pyrometallurgical devices such as cupolas, reverberator furnaces, sintering machine, roasters, and foundry furnaces;

(viii) Titanium dioxide chloride process oxidation reactors;

(ix) Methane reforming furnaces;

(x) Pulping liquor recovery furnaces;

(xi) Combustion devices used in the recovery of sulfur values from spent sulfuric acid;

(xii) Halogen acid furnaces (HAFs) for the production of acid from halogenated hazardous waste generated by chemical production facilities where the furnace is located on the site of a chemical production facility, the acid product has a halogen acid content of at least 3%, the acid product is used in a manufacturing process, and, except for hazardous waste burned as fuel, hazardous waste fed to the furnace has a minimum halogen content of 20% as-generated.

(xiii) Such other devices as the Board may, after notice and comment, add to this list on the basis of one or more of the following factors:

(A) The design and use of the device primarily to accomplish recovery of material products;

(B) The use of the device to burn or reduce raw materials to make a material product;

(C) The use of the device to burn or reduce secondary materials as effective substitutes for raw materials, in processes using raw materials as principal feedstocks;

(D) The use of the device to burn or reduce secondary materials as ingredients in an industrial process to make a material product;

(E) The use of the device in common industrial practice to produce a material product; and

(F) Other factors, as appropriate.

(65) "Infrared incinerator" means any enclosed device that

uses electric powered resistance heaters as a source of radiant heat followed by an afterburner using controlled flame combustion and which is not listed as an industrial furnace.

(66) "Inground tank" means a device meeting the definition of "tank" in Section R315-260-10 whereby a portion of the tank wall is situated to any degree within the ground, thereby preventing visual inspection of that external surface area of the tank that is in the ground.

(67) "Injection well" means a well into which fluids are injected. See also "underground injection".

(68) "Inner liner" means a continuous layer of material placed inside a tank or container which protects the construction materials of the tank or container from the contained waste or reagents used to treat the waste.

(69) "Installation inspector" means a person who, by reason of his knowledge of the physical sciences and the principles of engineering, acquired by a professional education and related practical experience, is qualified to supervise the installation of tank systems.

(70) "Intermediate facility" means any facility that stores hazardous secondary materials for more than 10 days, other than a hazardous secondary material generator or reclaimer of such material.

(71) "International shipment" means the transportation of hazardous waste into or out of the jurisdiction of the United States.

(72) "Lamp," also referred to as "universal waste lamp", is defined as the bulb or tube portion of an electric lighting device. A lamp is specifically designed to produce radiant energy, most often in the ultraviolet, visible, and infra-red regions of the electromagnetic spectrum. Examples of common universal waste electric lamps include, but are not limited to, fluorescent, high intensity discharge, neon, mercury vapor, high pressure sodium, and metal halide lamps.

(73) "Land-based unit" means an area where hazardous secondary materials are placed in or on the land before recycling. This definition does not include land-based production units.

(74) "Landfill" means a disposal facility or part of a facility where hazardous waste is placed in or on land and which is not a pile, a land treatment facility, a surface impoundment, an underground injection well, a salt dome formation, a salt bed formation, an underground mine, a cave, or a corrective action management unit.

(75) "Landfill cell" means a discrete volume of a hazardous waste landfill which uses a liner to provide isolation of wastes from adjacent cells or wastes. Examples of landfill cells are trenches and pits.

(76) "Land treatment facility" means a facility or part of a facility at which hazardous waste is applied onto or incorporated into the soil surface; such facilities are disposal facilities if the waste will remain after closure.

(77) "Large quantity generator" is a generator who generates any of the following amounts in a calendar month:

(i) Greater than or equal to 1,000 kilograms (2,200 lbs) of non-acute hazardous waste; or

(ii) Greater than 1 kilogram (2.2 lbs) of acute hazardous waste listed in Section R315-261-31 or Subsection R315-261-33(e); or

(iii) Greater than 100 kilograms (220 lbs) of any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill, into or on any land or water, of any acute hazardous waste listed in Section R315-261-31 or Subsection R315-261-33(e).

(78) "Leachate" means any liquid, including any suspended components in the liquid, that has percolated through or drained from hazardous waste.

(79) "Leak-detection system" means a system capable of detecting the failure of either the primary or secondary

containment structure or the presence of a release of hazardous waste or accumulated liquid in the secondary containment structure. Such a system shall employ operational controls, e.g., daily visual inspections for releases into the secondary containment system of aboveground tanks, or consist of an interstitial monitoring device designed to detect continuously and automatically the failure of the primary or secondary containment structure or the presence of a release of hazardous waste into the secondary containment structure.

(80) "Liner" means a continuous layer of natural or man-made materials, beneath or on the sides of a surface impoundment, landfill, or landfill cell, which restricts the downward or lateral escape of hazardous waste, hazardous waste constituents, or leachate.

(81) "Management" or "hazardous waste management" means the systematic control of the collection, source separation, storage, transportation, processing, treatment, recovery, and disposal of hazardous waste.

(82) "Manifest" is defined in Subsection 19-6-102(14) and is further defined as: the shipping document EPA Form 8700-22, including, if necessary, EPA Form 8700-22A, or the electronic manifest, originated and signed in accordance with the applicable requirements of Rules R315-262 through 265.

(83) "Manifest tracking number" means: The alphanumeric identification number, i.e., a unique three letter suffix preceded by nine numerical digits, which is pre-printed in Item 4 of the Manifest by a registered source.

(84) "Mercury-containing equipment" means a device or part of a device, including thermostats, but excluding batteries and lamps, that contains elemental mercury integral to its function.

(85) "Mining overburden returned to the mine site" means any material overlying an economic mineral deposit which is removed to gain access to that deposit and is then used for reclamation of a surface mine.

(86) "Miscellaneous unit" means a hazardous waste management unit where hazardous waste is treated, stored, or disposed of and that is not a container, tank, surface impoundment, pile, land treatment unit, landfill, incinerator, boiler, industrial furnace, underground injection well with appropriate technical standards under 40 CFR 146, containment building, corrective action management unit, unit eligible for a research, development, and demonstration permit under Section R315-270-65, or staging pile.

(87) "Monitoring" means all procedures used to systematically inspect and collect data on operational parameters of the facility or on the quality of the air, ground water, surface water, or soils.

(88) "Movement" means that hazardous waste transported to a facility in an individual vehicle.

(89) "New hazardous waste management facility" or "new facility" means a facility which began operation, or for which construction commenced after November 19, 1980. See also "Existing hazardous waste management facility".

(90) "New tank system" or "new tank component" means a tank system or component that will be used for the storage or treatment of hazardous waste and for which installation has commenced after July 14, 1986; except, however, for purposes of Subsections R315-264-193(g)(2) and 40 CFR 265.193(g)(2), which is adopted and incorporated by reference, a new tank system is one for which construction commences after July 14, 1986, or December 16, 1988 for purposes of implementing the non-HSWA requirements of the tank regulations as promulgated by EPA on July 14, 1986, 51 FR 25470, as they have been incorporated into the corresponding rules of R315; except, however, for purposes of 40 CFR 265-193(g)(2), which is adopted and incorporated by reference, and Subsection R315-264-193(g)(2), a new tank system is one which construction commences after July 14, 1986. A non-HSWA new tank system

or non-HSWA new tank component is one which does not implement any of the requirements of the federal Hazardous and Solid Waste Amendments of 1984 (HSWA) as identified in Table 1 of 40 CFR 271.1. See also "existing tank system."

(91) "No free liquids, as used in Subsections R315-261-4(a)(26) and R315-261-4(b)(18)", means that solvent-contaminated wipes may not contain free liquids as determined by Method 9095B, Paint Filter Liquids Test, included in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, and that there is no free liquid in the container holding the wipes. No free liquids may also be determined using another standard or test method as defined by the Director.

(92) "Non-acute hazardous waste" means all hazardous wastes that are not acute hazardous waste, as defined in Section R315-260-10.

(93) "On ground tank" means a device meeting the definition of "tank" in Section R315-260-10 and that is situated in such a way that the bottom of the tank is on the same level as the adjacent surrounding surface so that the external tank bottom cannot be visually inspected.

(94) "On-site" means the same or geographically contiguous property which may be divided by public or private right-of-way, provided the entrance and exit between the properties is at a cross-roads intersection, and access is by crossing as opposed to going along, the right-of-way. Non-contiguous properties owned by the same person but connected by a right-of-way which he controls and to which the public does not have access, is also considered on-site property.

(95) "Open burning" means the combustion of any material without the following characteristics:

(i) Control of combustion air to maintain adequate temperature for efficient combustion,

(ii) Containment of the combustion-reaction in an enclosed device to provide sufficient residence time and mixing for complete combustion, and

(iii) Control of emission of the gaseous combustion products. See also "incineration" and "thermal treatment".

(96) "Operator" means the person responsible for the overall operation of a facility.

(97) "Owner" means the person who owns a facility or part of a facility.

(98) "Partial closure" means the closure of a hazardous waste management unit in accordance with the applicable closure requirements of Rules R315-264 and 265 at a facility that contains other active hazardous waste management units. For example, partial closure may include the closure of a tank, including its associated piping and underlying containment systems, landfill cell, surface impoundment, waste pile, or other hazardous waste management unit, while other units of the same facility continue to operate.

(99) "Polychlorinated biphenyl, PCB" and "PCBs" means any chemical substance that is limited to the biphenyl molecule that has been chlorinated to varying degrees or any combination of substances which contains such substance. PCB and PCBs as contained in PCB items are defined in Section R315-260-10. For any purposes under Rules R315-260 through 266, 268, 270, 273, R315-15, and R315-5-101, inadvertently generated non-Arochlor PCBs are defined as the total PCBs calculated following division of the quantity of monochlorinated biphenyls by 50 and dichlorinated biphenyls by 5.

(100) "PCB Item" means any PCB Article, PCB Article Container, PCB Container, PCB Equipment, or anything that deliberately or unintentionally contains or has as a part of it any PCB or PCBs.

(101) "Permit" means the plan approval as required by subsection 19-6-108(3)(a), or equivalent control document issued by the Director to implement the requirements of the Utah Solid and Hazardous Waste Act;

(102) "Permittee" is defined in Subsection 19-6-102(18) and includes any person who has received an approval of a hazardous waste operation plan under Section 19-6-108 and Rule R315-262 or a Federal RCRA permit for a treatment, storage, or disposal facility.

(103) "Person" means an individual, trust, firm, joint stock company, Federal Agency, corporation, including a government corporation, partnership, association, State, municipality, commission, political subdivision of a State, or any interstate body.

(104) "Personnel" or "facility personnel" means all persons who work at, or oversee the operations of, a hazardous waste facility, and whose actions or failure to act may result in noncompliance with the requirements of Rules R315-264 or 265.

(105) "Pesticide" means any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, or intended for use as a plant regulator, defoliant, or desiccant, other than any article that:

(i) Is a new animal drug under FFDCA section 201(w), or

(ii) Is an animal drug that has been determined by regulation of the Secretary of Health and Human Services not to be a new animal drug, or

(iii) Is an animal feed under FFDCA section 201(x) that bears or contains any substances described by Subsection R315-260-10(c)(105)(i) or (ii).

(106) "Pile" means any non-containerized accumulation of solid, nonflowing hazardous waste that is used for treatment or storage and that is not a containment building.

(107) "Plasma arc incinerator" means any enclosed device using a high intensity electrical discharge or arc as a source of heat followed by an afterburner using controlled flame combustion and which is not listed as an industrial furnace.

(108) "POHC's" means principle organic hazardous constituents.

(109) "Point source" means any discernible, confined, and discrete conveyance, including, but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture.

(110) "Precipitation run-off" means water generated from naturally occurring storm events. If the precipitation run-off has been in contact with a waste defined in Sections R315-261-20 through 24, it qualifies as "precipitation run-off" if the water does not exhibit any of the characteristics identified in Section R315-261-20 through 24. If the precipitation run-off has been in contact with a waste listed in Sections R315-261-30 through 35, then it qualifies as "precipitation run-off" when the water has been excluded under Section R315-260-22. Water containing any leachate does not qualify as "precipitation run-off".

(111) "Publicly owned treatment works" or "POTW" means any device or system used in the treatment, including recycling and reclamation, of municipal sewage or industrial wastes of a liquid nature which is owned by the State or a political subdivision within the State. This definition includes sewers, pipes, or other conveyances only if they convey wastewater to a POTW providing treatment.

(112) "Qualified Ground-Water Scientist" means a scientist or engineer who has received a baccalaureate or post-graduate degree in the natural sciences or engineering, and has sufficient training and experience in ground-water hydrology and related fields as may be demonstrated by state registration, professional certifications, or completion of accredited university courses that enable that individual to make sound professional judgements regarding ground-water monitoring and contaminant fate and transport.

(113) "RCRA" means the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended, 42 U.S.C. section 6901 et seq.

(114) "Remanufacturing" means processing a higher-value hazardous secondary material in order to manufacture a product that serves a similar functional purpose as the original commercial-grade material. For the purpose of this definition, a hazardous secondary material is considered higher-value if it was generated from the use of a commercial-grade material in a manufacturing process and can be remanufactured into a similar commercial-grade material.

(115) "Remediation waste" means all solid and hazardous wastes, and all media, including ground water, surface water, soils, and sediments, and debris, that are managed for implementing cleanup.

(116) "Remediation waste management site" means a facility where an owner or operator is or will be treating, storing or disposing of hazardous remediation wastes. A remediation waste management site is not a facility that is subject to corrective action under Section R315-264-101, but is subject to corrective action requirements if the site is located in such a facility.

(117)(i) "Replacement unit" means a landfill, surface impoundment, or waste pile unit:

(A) from which all or substantially all of the waste is removed; and

(B) that is subsequently reused to treat, store, or dispose of hazardous waste.

(ii) "Replacement unit" does not apply to a unit from which waste is removed during closure, if the subsequent reuse solely involves the disposal of waste from that unit and other closing units or corrective action areas at the facility, in accordance with a closure plan approved by the Director or a corrective action approved by the Director.

(118) "Representative sample" means a sample of a universe or whole, e.g., waste pile, lagoon, ground water, which can be expected to exhibit the average properties of the universe or whole.

(119) "Run-off" means any rainwater, leachate, or other liquid that drains over land from any part of a facility.

(120) "Run-on" means any rainwater, leachate, or other liquid that drains over land onto any part of a facility.

(121) "Saturated zone" or "zone of saturation" means that part of the earth's crust in which all voids are filled with water.

(122) "Sludge" means any solid, semi-solid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility exclusive of the treated effluent from a wastewater treatment plant.

(123) "Sludge dryer" means any enclosed thermal treatment device that is used to dehydrate sludge and that has a maximum total thermal input, excluding the heating value of the sludge itself, of 2,500 Btu/lb of sludge treated on a wet-weight basis.

(124) "Small Quantity Generator" is a generator who generates the following amounts in a calendar month:

(i) Greater than 100 kilograms (220 lbs) but less than 1,000 kilograms (2,200 lbs) of non-acute hazardous waste; and

(ii) Less than or equal to 1 kilogram (2.2 lbs) of acute hazardous waste listed in Section R315-261-31 or Subsection R315-261-33(e); and

(iii) Less than or equal to 100 kilograms (220 lbs) of any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill, into or on any land or water, of any acute hazardous waste listed in Section R315-261-31 or Subsection R315-261-33(e).

(125) "Solid Waste Management Unit" means any discernible unit at which solid wastes have been placed at any time, irrespective of whether the unit was intended for the

management of solid or hazardous waste. Such units include any area at a facility at which solid wastes have been routinely and systematically released.

(126) "Solvent-contaminated wipe" means:

(i) A wipe that, after use or after cleaning up a spill, either:

(A) Contains one or more of the F001 through F005 solvents listed in Section R315-261-31 or the corresponding P- or U- listed solvents found in Section R315-261-33;

(B) Exhibits a hazardous characteristic found in Sections R315-261-20 through 24 when that characteristic results from a solvent listed in Rule R315-261; and/or

(C) Exhibits only the hazardous waste characteristic of ignitability found in Section R315-261-21 due to the presence of one or more solvents that are not listed in Rule R315-261.

(ii) Solvent-contaminated wipes that contain listed hazardous waste other than solvents, or exhibit the characteristic of toxicity, corrosivity, or reactivity due to contaminants other than solvents, are not eligible for the exclusions at Subsections R315-261-4(a)(26) and R315-261-4(b)(18).

(127) "Sorbent" means a material that is used to soak up free liquids by either adsorption or absorption, or both.

(128) "Sorb" means to either adsorb or absorb, or both.

(129) A "spent material" is any material that has been used and as a result of contamination can no longer serve the purpose for which it was produced without processing.

(130) "Spill" means the accidental discharging, spilling, leaking, pumping, pouring, emitting, emptying, releasing, or dumping of hazardous wastes or materials which, when spilled, become hazardous wastes, into or on any land or water.

(131) "Staging pile" means an accumulation of solid, non-flowing remediation waste, as defined in Section R315-260-10, that is not a containment building and that is used only during remedial operations for temporary storage at a facility. Staging piles shall be designated by the Director according to the requirements of Section R315-264-554.

(132) "State" means the state of Utah.

(133) "Storage" is defined in Subsection 19-6-102(20) and includes the holding of hazardous waste for a temporary period, at the end of which the hazardous waste is treated, disposed of, or stored elsewhere.

(134) "Sump" means any pit or reservoir that meets the definition of tank and those troughs/trenches connected to it that serve to collect hazardous waste for transport to hazardous waste storage, treatment, or disposal facilities; except that as used in the landfill, surface impoundment, and waste pile rules, "sump" means any lined pit or reservoir that serves to collect liquids drained from a leachate collection and removal system or leak detection system for subsequent removal from the system.

(135) "Surface impoundment" or "impoundment" means a facility or part of a facility which is a natural topographic depression, man-made excavation, or diked area formed primarily of earthen materials, although it may be lined with man-made materials, which is designed to hold an accumulation of liquid wastes or wastes containing free liquids, and which is not an injection well. Examples of surface impoundments are holding, storage, settling, and aeration pits, ponds, and lagoons.

(136) "Tank" means a stationary device, designed to contain an accumulation of hazardous waste which is constructed primarily of non-earthen materials, e.g., wood, concrete, steel, plastic, which provide structural support.

(137) "Tank system" means a hazardous waste storage or treatment tank and its associated ancillary equipment and containment system.

(138) "TEQ" means toxicity equivalence, the international method of relating the toxicity of various dioxin/furan congeners to the toxicity of 2,3,7,8-tetrachlorodibenzo-p-dioxin.

(139) "Thermal treatment" means the treatment of hazardous waste in a device which uses elevated temperatures

as the primary means to change the chemical, physical, or biological character or composition of the hazardous waste. Examples of thermal treatment processes are incineration, molten salt, pyrolysis, calcination, wet air oxidation, and microwave discharge. See also "incinerator" and "open burning".

(140) "Thermostat" means a temperature control device that contains metallic mercury in an ampule attached to a bimetal sensing element, and mercury-containing ampules that have been removed from these temperature control devices in compliance with the requirements of Subsections R315-273-13(c)(2) or R315-273-33(c)(2).

(141) "Totally enclosed treatment facility" means a facility for the treatment of hazardous waste which is directly connected to an industrial production process and which is constructed and operated in a manner which prevents the release of any hazardous waste or any constituent thereof into the environment during treatment. An example is a pipe in which waste acid is neutralized.

(142) "Transfer facility" means any transportation-related facility, including loading docks, parking areas, storage areas and other similar areas where shipments of hazardous waste or hazardous secondary materials are held during the normal course of transportation.

(143) "Transport vehicle" means a motor vehicle or rail car used for the transportation of cargo by any mode. Each cargo-carrying body; trailer, railroad freight car, etc.; is a separate transport vehicle.

(144) "Transportation" is defined in Subsection 19-6-102(21) and includes the movement of hazardous waste by air, rail, highway, or water.

(145) "Transporter" means a person engaged in the offsite transportation of hazardous waste by air, rail, highway, or water.

(146)(i) "Treatability study" means a study in which a hazardous waste is subjected to a treatment process to determine:

(A) Whether the waste is amenable to the treatment process,

(B) what pretreatment, if any, is required,

(C) the optimal process conditions needed to achieve the desired treatment,

(D) the efficiency of a treatment process for a specific waste or wastes, or

(E) the characteristics and volumes of residuals from a particular treatment process.

(ii) Also included in this definition for the purpose of the Subsection R315-261-4 (e) and (f) exemptions are liner compatibility, corrosion, and other material compatibility studies and toxicological and health effects studies.

(iii) A "treatability study" is not a means to commercially treat or dispose of hazardous waste.

(147) "Treatment" is defined in Subsection 19-6-102(22) and includes any method, technique, or process, including neutralization, designed to change the physical, chemical, or biological character or composition of any hazardous waste so as to neutralize such waste, or so as to recover energy or material resources from the waste, or so as to render such waste non-hazardous, or less hazardous; safer to transport, store, or dispose of; or amenable for recovery, amenable for storage, or reduced in volume.

(148) "Treatment zone" means a soil area of the unsaturated zone of a land treatment unit within which hazardous constituents are degraded, transformed, or immobilized.

(149) "Underground injection" means the subsurface emplacement of fluids through a bored, drilled or driven well; or through a dug well, where the depth of the dug well is greater than the largest surface dimension. See also "injection well".

(150) "Underground tank" means a device meeting the

definition of "tank" in Section R315-260-10 whose entire surface area is totally below the surface of and covered by the ground.

(151) "Unfit-for use tank system" means a tank system that has been determined through an integrity assessment or other inspection to be no longer capable of storing or treating hazardous waste without posing a threat of release of hazardous waste to the environment.

(152) "United States" means the 50 States, the District of Columbia, the Commonwealth of Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands.

(153) "Universal waste" means any of the following hazardous wastes that are managed under the universal waste requirements of Rule R315-273:

(i) Batteries as described in Section R315-273-2;

(ii) Pesticides as described in Section R315-273-3;

(iii) Mercury-containing equipment as described in Section R315-273-4;

(iv) Lamps as described in Section R315-273-5;

(v) Antifreeze as described in Subsection R315-273-6(a); and

(vi) Aerosol cans as described in Subsection R315-273-6(b).

(154) Universal waste handler

(i) Means:

(A) A generator of universal waste; or

(B) The owner or operator of a facility, including all contiguous property, that receives universal waste from other universal waste handlers, accumulates universal waste, and sends universal waste to another universal waste handler, to a destination facility, or to a foreign destination.

(ii) Does not mean:

(A) A person who treats, except under the provisions of Subsection R315-273-13(a) or (c), or R315-273-33(a) or (c), disposes of, or recycles universal waste; or

(B) A person engaged in the off-site transportation of universal waste by air, rail, highway, or water, including a universal waste transfer facility.

(155) "Universal waste transporter" means a person engaged in the off-site transportation of universal waste by air, rail, highway, or water.

(156) "Unsaturated zone" or "zone of aeration" means the zone between the land surface and the water table.

(157) "Uppermost aquifer" means the geologic formation nearest the natural ground surface that is an aquifer, as well as lower aquifers that are hydraulically interconnected with this aquifer within the facility's property boundary.

(158) Used oil is defined in Subsection 19-6-703(19).

(159) "User of the electronic manifest system" means a hazardous waste generator, a hazardous waste transporter, an owner or operator of a hazardous waste treatment, storage, recycling, or disposal facility, or any other person that:

(i) Is required to use a manifest to comply with:

(A) Any federal or state requirement to track the shipment, transportation, and receipt of hazardous waste or other waste material that is shipped from the site of generation to an off-site designated facility for treatment, storage, recycling, or disposal; or

(B) Any federal or state requirement to track the shipment, transportation, and receipt of rejected wastes or regulated container residues that are shipped from a designated facility to an alternative facility, or returned to the generator; and

(ii) Elects to use the system to obtain, complete and transmit an electronic manifest format supplied by the EPA electronic manifest system, or

(iii) Elects to use the paper manifest form and submits to the system for data processing purposes a paper copy of the manifest, or data from such a paper copy, in accordance with

Subsections R315-264-71(a)(2)(v) or 40 CFR 265.71(a)(2)(v) which is adopted and incorporated by reference. These paper copies are submitted for data exchange purposes only and are not the official copies of record for legal purposes.

(160) "Very small quantity generator" is a generator who generates less than or equal to the following amounts in a calendar month:

(i) 100 kilograms (220 lbs) of non-acute hazardous waste; and

(ii) 1 kilogram (2.2 lbs) of acute hazardous waste listed in Section R315-261-31 or Subsection R315-261-33(e); and

(iii) 100 kilograms (220 lbs) of any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill, into or on any land or water, of any acute hazardous waste listed in Section R315-261-31 or Subsection R315-261-33(e).

(161) "Vessel" includes every description of watercraft, used or capable of being used as a means of transportation on the water.

(162) "Waste management area" means the limit projected in the horizontal plane of the area on which waste will be placed during the active life of a regulated unit. The waste management area includes horizontal space taken up by any liner, dike, or other barrier designed to contain waste in a regulated unit. If the facility contains more than one regulated unit, the waste management area is described by an imaginary line circumscribing the several regulated units.

(163) "Wastewater treatment unit" means a device which:

(i) Is part of a wastewater treatment facility that is subject to regulation under either section 402 or 307(b) of the Clean Water Act; and

(ii) Receives and treats or stores an influent wastewater that is a hazardous waste as defined in Section R315-261-3, or that generates and accumulates a wastewater treatment sludge that is a hazardous waste as defined in Section R315-261-3, or treats or stores a wastewater treatment sludge which is a hazardous waste as defined in Section R315-261-3; and

(iii) Meets the definition of tank or tank system in Section R315-260-10.

(164) "Water, bulk shipment" means the bulk transportation of hazardous waste which is loaded or carried on board a vessel without containers or labels.

(165) "Well" means any shaft or pit dug or bored into the earth, generally of a cylindrical form, and often walled with bricks or tubing to prevent the earth from caving in.

(166) "Well injection": See "underground injection"

(167) "Wipe" means a woven or non-woven shop towel, rag, pad, or swab made of wood pulp, fabric, cotton, polyester blends, or other material.

(168) "Zone of engineering control" means an area under the control of the owner/operator that, upon detection of a hazardous waste release, can be readily cleaned up prior to the release of hazardous waste or hazardous constituents to ground water or surface water.

R315-260-11. References.

(a) For purposes of Rules R315-260 through 266, 268, 270, and 273, Rule R315-15 and Rule R315-101, the references of 40 CFR 260.11, 2015 ed, as amended by 81 FR 85806, November 28, 2016, are adopted and incorporated by reference.

R315-260-12. Definitions for Rule R315-101.

(a) For purposes of Rule R315-101 regarding cleanup action and Risk-Based Closure Standards, the following terms are defined:

(1) "The concentration term, C" is calculated as the 95% upper confidence limit, UCL, on the arithmetic average for normally distributed data, or as the 95% upper confidence limit on the arithmetic average for lognormally distributed data. For

normally distributed data, $C = \text{Mean} + t \times \text{Standard Deviation}/n^{1/2}$, where n is the number of observations, and t is Student's t distribution (at the 95% one-sided confidence level and n-1 degrees of freedom), tables of which are printed in most introductory statistics textbooks. For lognormally distributed data, $C = \exp(\text{Mean of lognormal-transformed data} + 0.5 \times \text{Variance of lognormal-transformed data} + \text{Standard Deviation of lognormal-transformed data} \times H/(n - 1)^{1/2})$, where n is the number of observations, and H is Land's H statistic (at the 95% one-sided confidence level), tables of which are printed in advanced statistics books. For data which are not normally nor lognormally distributed, appropriate statistics, such as nonparametric confidence limits, shall be applied.

(2) "Area of contamination" means a hazardous waste management unit or an area where a release has occurred. The boundary is defined as the furthest extent where contamination from a defined source has migrated in any medium at the time the release is first identified.

(3) "Contaminate" means to render a medium polluted through the introduction of hazardous waste or hazardous constituents as identified in R315-261, Appendix VIII.

(4) "Hazard index" means the sum of more than one hazard quotient for multiple substances, multiple exposure pathways, or both. The Hazard Index is calculated separately for chronic, subchronic, and shorter duration exposures.

(5) "Hazard quotient" means the ratio of a single substance exposure level over a specified time period, e.g. subchronic, to a reference dose for that substance derived from a similar exposure period.

(6) "Risk-based closure" means closure of a site where hazardous waste was managed or any medium has been contaminated by a release of hazardous waste or hazardous constituents, and where hazardous waste or hazardous constituents remain at the site in any medium at concentrations determined, under Rule R315-101, to cause minimal levels of risk to human health and the environment so as to require no further action or monitoring on the part of the responsible party nor any notice of hazardous waste management on the deed to the property.

(7) "Reasonable maximum exposure (RME)" means the highest exposure that is reasonably expected to occur at a site. The goal of RME is to combine upper-bound and mid-range exposure factors so that the result represents an exposure scenario that is both protective and reasonable; not the worst possible case.

(8) "Release" means spill or discharge of hazardous waste, hazardous constituents, or material that becomes hazardous waste when released to the environment.

(9) "Responsible party" means the owner or operator of a facility, or any other person responsible for the release of hazardous waste or hazardous constituents.

(10) "Site" means the area of contamination and any other area that could be impacted by the released contaminants, or could influence the migration of those contaminants, regardless of whether the site is owned by the responsible party.

R315-260-19. Variances Authorized.

(a) Variances shall be granted by the Board only to the extent allowed under State and Federal law.

(b) The Board may consider a variance request in accordance with the standard established in section 19-6-111.

(c) The Board may, at its own instance, review any variance granted during the term for which a variance was granted.

(d) A person applying for a variance shall submit the application, in writing, to the Director. The application shall provide the following:

(1) Citation of the statutory, regulatory, or permit requirement from which the variance is sought;

(2) For variances for which the Board promulgates or has promulgated specific rules, information meeting the requirements of those rules;

(3) Information demonstrating that application of or compliance with the requirement would cause undue or unreasonable hardship on the person applying for the variance;

(4) Proposed alternative requirements, if any;

(5) Information demonstrating that the variance will achieve the purpose and intent of the statutory, regulatory, or permit provision from which the variance is sought;

(6) Information demonstrating that any alternative requirement or requirements will adequately protect human health and the environment; and

(7) If no alternative requirement is proposed, information demonstrating that if the variance is granted, human health and the environment will be adequately protected.

(e) A person applying for a variance shall provide such additional information as the Board or the Director requires.

(f) Nothing in Subsection R315-260-19(d) or (e) limits the authority of the Board to grant variances in accordance with the standard established in Section 19-6-111. A person applying for a variance under Section R315-263-32 shall provide such information described in Subsection R315-260-19(d) as the Director determines.

R315-260-20. Petition to Amend Rules.

(a) It is the intent of the Board to insure the compatibility and equivalency of Rules R315-260 through 266, 268, 270, 273 and 124 with the regulations promulgated by EPA under the Resource Conservation and Recovery Act of 1976.

(b) Any person may petition the Board to modify or revoke any provision in Rules R315-260 through 266, 268, 270, 273, Rule R315-15 Rule R315-101, R315-102, and R315-124. A petition shall be considered under the procedures outlined in Section 63G-3-601 and Rule R15-2.

R315-260-21. Petitions for Equivalent Testing or Analytical Methods.

(a) Any person seeking to add a testing or analytical method to Rules R315-261, R315-264, or R315-265 may petition for a regulatory amendment under Section R315-260-21 and Section R315-260-20. To be successful, the person shall demonstrate to the satisfaction of the Board that the proposed method is equal to or superior to the corresponding method prescribed in Rules R315-261, R315-264, or R315-265, in terms of its sensitivity, accuracy, and precision, i.e., reproducibility.

(b) Each petition shall include, in addition to the information required by Section R315-260-20:

(1) A full description of the proposed method, including all procedural steps and equipment used in the method;

(2) A description of the types of wastes or waste matrices for which the proposed method may be used;

(3) Comparative results obtained from using the proposed method with those obtained from using the relevant or corresponding methods prescribed in Rules R315-261, R315-264, or R315-265;

(4) An assessment of any factors which may interfere with, or limit the use of, the proposed method; and

(5) A description of the quality control procedures necessary to ensure the sensitivity, accuracy and precision of the proposed method.

(c) After receiving a petition for an equivalent method, the Board may request any additional information on the proposed method which the Board may reasonably require to evaluate the method.

(d) If the Board amends the rules to permit use of a new testing method, the method shall be incorporated by reference in Section R315-260-11.

(e) Petitioner may, alternatively, proceed under the

provisions of 40 CFR 260.21 to have an alternative analytical method approved by EPA. In the event approval is granted, the petitioner shall so notify the Board and the Director and the decision of EPA shall be binding upon the Board and the Director.

R315-260-22. Petitions to Amend Rule to Exclude a Waste Produced at a Particular Facility.

(a) Any person seeking to exclude a waste at a particular generating facility from the lists in Sections R315-261-30 through 35 may petition for a regulatory amendment under Section R315-260-22 and Section R315-260-20. To be successful:

(1) The petitioner shall demonstrate to the satisfaction of the Board that the waste produced by a particular generating facility does not meet any of the criteria under which the waste was listed as a hazardous or an acutely hazardous waste; and

(2) Based on a complete application, the Board shall determine, where it has a reasonable basis to believe that factors, including additional constituents, other than those for which the waste was listed could cause the waste to be a hazardous waste, that such factors do not warrant retaining the waste as a hazardous waste. A waste which is so excluded, however, still may be a hazardous waste by operation of Sections 261-20 through 24.

(b) The procedures in Sections R315-260-22 and R315-260-20 may also be used to petition the Board for a regulatory amendment to exclude from Subsections R315-261-3(a)(2)(ii) or (c), a waste which is described in Subsections R315-261-3(a)(2)(ii) or (c) and is either a waste listed Sections R315-261-30 through 35 or is derived from a waste listed in Sections R315-261-30 through 35. This exclusion may only be issued for a particular generating, storage, treatment, or disposal facility. The petitioner shall make the same demonstration as required by Subsection R315-260-22(a). Where the waste is a mixture of solid waste and one or more listed hazardous wastes or is derived from one or more hazardous wastes, his demonstration shall be made with respect to the waste mixture as a whole; analyses shall be conducted for not only those constituents for which the listed waste contained in the mixture was listed as hazardous, but also for factors, including additional constituents, that could cause the waste mixture to be a hazardous waste. A waste which is so excluded may still be a hazardous waste by operation of Sections R315-261-20 through 24.

(c) If the waste is listed with codes "I", "C", "R", or "E", in Sections R315-261-30 through 35,

(1) The petitioner shall show that the waste does not exhibit the relevant characteristic for which the waste was listed as defined in Sections R315-261-21 through 24 using any applicable methods prescribed therein. The petitioner also shall show that the waste does not exhibit any of the other characteristics defined in Sections R315-261-21 through 24 using any applicable methods prescribed therein;

(2) Based on a complete application, the Board shall determine, where it has a reasonable basis to believe that factors, including additional constituents, other than those for which the waste was listed could cause the waste to be hazardous waste, that such factors do not warrant retaining the waste as a hazardous waste. A waste which is so excluded, however, still may be a hazardous waste by operation of Sections R315-261-20 through 24.

(d) If the waste is listed with code "T" in Sections R315-261-30 through 35,

(1) The petitioner shall demonstrate that the waste:

(i) Does not contain the constituent or constituents, as defined in appendix VII of Rule R315-261, that caused the waste to be listed; or

(ii) Although containing one or more of the hazardous

constituents, as defined in appendix VII of Rule R315-261, that caused the waste to be listed, does not meet the criterion of Subsection R315-261-11(a)(3) when considering the factors in Subsections R315-261-11(a)(3)(i) through (xi) under which the waste was listed as hazardous; and

(2) Based on a complete application, the Board shall determine, where it has a reasonable basis to believe that factors, including additional constituents, other than those for which the waste was listed could cause the waste to be a hazardous waste, that such factors do not warrant retaining the waste as a hazardous waste; and

(3) The petitioner shall demonstrate that the waste does not exhibit any of the characteristics defined in Sections R315-261.21 Through 24 using any applicable methods prescribed therein;

(4) A waste which is so excluded, however, still may be a hazardous waste by operation of Sections R315-261-20 through 24.

(e) If the waste is listed with the code "H" in Sections R315-261-30 through 35,

(1) The petitioner shall demonstrate that the waste does not meet the criterion of Subsection R315-261-11(a)(2); and

(2) Based on a complete application, the Board shall determine, where it has a reasonable basis to believe that additional factors, including additional constituents, other than those for which the waste was listed could cause the waste to be a hazardous waste, that such factors do not warrant retaining the waste as a hazardous waste; and

(3) The petitioner shall demonstrate that the waste does not exhibit any of the characteristics defined in Sections R315-261-21 through 24 using any applicable methods prescribed therein;

(4) A waste which is so excluded, however, still may be a hazardous waste by operation of Sections R315-261-20 through 24.

(f) Reserved.

(g) Reserved.

(h) Demonstration samples shall consist of enough representative samples, but in no case less than four samples, taken over a period of time sufficient to represent the variability or the uniformity of the waste.

(i) Each petition shall include, in addition to the information required by subsection R315-260-20(b):

(1) The name and address of the laboratory facility performing the sampling or tests of the waste;

(2) The names and qualifications of the persons sampling and testing the waste;

(3) The dates of sampling and testing;

(4) The location of the generating facility;

(5) A description of the manufacturing processes or other operations and feed materials producing the waste and an assessment of whether such processes, operations, or feed materials can or might produce a waste that is not covered by the demonstration;

(6) A description of the waste and an estimate of the average and maximum monthly and annual quantities of waste covered by the demonstration;

(7) Pertinent data on and discussion of the factors delineated in the respective criterion for listing a hazardous waste, where the demonstration is based on the factors in Subsection R315-261-11(a)(3);

(8) A description of the methodologies and equipment used to obtain the representative samples;

(9) A description of the sample handling and preparation techniques, including techniques used for extraction, containerization and preservation of the samples;

(10) A description of the tests performed, including results;

(11) The names and model numbers of the instruments used in performing the tests; and

(12) The following statement signed by the generator of the waste or his authorized representative:

(i) I certify under penalty of law that I have personally examined and am familiar with the information submitted in this demonstration and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

(j) After receiving a petition for an exclusion, the Board may request any additional information which the Board may reasonably require to evaluate the petition.

(k) An exclusion will only apply to the waste generated at the individual facility covered by the demonstration and will not apply to waste from any other facility.

(l) The Board may exclude only part of the waste for which the demonstration is submitted where it has reason to believe that variability of the waste justifies a partial exclusion.

(m) Petitioner may, alternatively, proceed under the provisions of 40 CFR 260.22 to have a particular waste delisted by EPA. In the event delisting is granted, the petitioner shall so notify the Board and the Director and the decision of EPA will be binding upon the Board and the Director unless, within 30 days after such notification, the Board specifically overrules the decision of EPA. In such event, the petitioner may petition the Board directly under Section R315-260-22 for the relief sought.

R315-260-23. Petitions to Amend Rule R315-273 to Include Additional Hazardous Wastes.

(a) Any person seeking to add a hazardous waste or a category of hazardous waste to the universal waste regulations of Rule R315-273 may petition for a regulatory amendment under Section R315-260-23 Section R315-260-20, and Sections R315-273-80 and 81.

(b) To be successful, the petitioner shall demonstrate to the satisfaction of the Board that regulation under the universal waste regulations of Rule R315-273: Is appropriate for the waste or category of waste; will improve management practices for the waste or category of waste; and will improve implementation of the hazardous waste program. The petition shall include the information required by Subsection R315-260-20(b). The petition should also address as many of the factors listed in Section R315-273-81 as are appropriate for the waste or category of waste addressed in the petition.

(c) The Board shall grant or deny a petition using the factors listed in Section R315-273-81. The decision shall be based on the weight of evidence showing that regulation under Rule R315-273 is appropriate for the waste or category of waste, will improve management practices for the waste or category of waste, and will improve implementation of the hazardous waste program.

(d) The Board may request additional information needed to evaluate the merits of the petition.

R315-260-30. Non-Waste Determinations and Exclusion from Classification as a Solid Waste.

In accordance with the standards and criteria in Sections R315-260-31 and 34 and the procedures in Section R315-260-33, the Director may determine on a case-by-case basis that the following recycled materials are not solid wastes:

(a) Materials that are accumulated speculatively without sufficient amounts being recycled, as defined in Subsection R315-261-1(c)(8);

(b) Materials that are reclaimed and then reused within the original production process in which they were generated;

(c) Materials that have been reclaimed but must be reclaimed further before the materials are completely recovered;

(d) Hazardous secondary materials that are reclaimed in a

continuous industrial process;

(e) Hazardous secondary materials that are indistinguishable in all relevant aspects from a product or intermediate; and

(f) Hazardous secondary materials that are transferred for reclamation under Subsection R315-261-4(a)(24) and are managed at a verified reclamation facility or intermediate facility where the management of the hazardous secondary materials is not addressed under a Part B permit or interim status standards.

R315-260-31. Standards and Criteria for Exclusion from Classification as a Solid Waste.

(a) The Director may grant requests for exclusion from classifying as a solid waste those materials that are accumulated speculatively without sufficient amounts being recycled if the applicant demonstrates that sufficient amounts of the material will be recycled or transferred for recycling in the following year. If exclusion is granted, it is valid only for the following year, but can be renewed, on an annual basis, by filing a new application. The Director's decision will be based on the following criteria:

(1) The manner in which the material is expected to be recycled, when the material is expected to be recycled, and whether this expected disposition is likely to occur, for example, because of past practice, market factors, the nature of the material, or contractual arrangements for recycling;

(2) The reason that the applicant has accumulated the material for one or more years without recycling 75 percent of the volume accumulated at the beginning of the year;

(3) The quantity of material already accumulated and the quantity expected to be generated and accumulated before the material is recycled;

(4) The extent to which the material is handled to minimize loss; and

(5) Other relevant factors.

(b) The Director may grant requests for exclusion from classifying as a solid waste those materials that are reclaimed and then reused as feedstock within the original production process in which the materials were generated if the reclamation operation is an essential part of the production process. This determination will be based on the following criteria:

(1) How economically viable the production process would be if it were to use virgin materials, rather than reclaimed materials;

(2) The extent to which the material is handled before reclamation to minimize loss;

(3) The time periods between generating the material and its reclamation, and between reclamation and return to the original primary production process;

(4) The location of the reclamation operation in relation to the production process;

(5) Whether the reclaimed material is used for the purpose for which it was originally produced when it is returned to the original process, and whether it is returned to the process in substantially its original form;

(6) Whether the person who generates the material also reclaims it; and

(7) Other relevant factors.

(c) The Director may grant requests for exclusion from classifying as a solid waste those hazardous secondary materials that have been partially reclaimed, but must be reclaimed further before recovery is completed, if the partial reclamation has produced a commodity-like material. A determination that a partially-reclaimed material for which the change in classification is sought is commodity-like will be based on whether the hazardous secondary material is legitimately recycled as specified in Section R315-260-43 and on whether all of the following decision criteria are satisfied:

(1) Whether the degree of partial reclamation the material

has undergone is substantial as demonstrated by using a partial reclamation process other than the process that generated the hazardous waste;

(2) Whether the partially reclaimed material has sufficient economic value that it will be purchased for further reclamation;

(3) Whether the partially-reclaimed material is a viable substitute for a product or intermediate produced from virgin or raw materials which is used in subsequent production steps;

(4) Whether there is a market for the partially-reclaimed material as demonstrated by known customer(s) who are further reclaiming the material, e.g., records of sales and/or contracts and evidence of subsequent use, such as bills of lading; and

(5) Whether the partially-reclaimed material is handled to minimize loss.

(d) The Director may grant requests for an exclusion from classification as a solid waste those hazardous secondary materials that are transferred for reclamation under Subsection R315-261-4(a)(24) and are managed at a verified reclamation facility or intermediate facility where the management of the hazardous secondary materials is not addressed under a Part B permit or interim status standards. The Director's decision will be based on the following criteria:

(1) The reclamation facility or intermediate facility shall demonstrate that the reclamation process for the hazardous secondary materials is legitimate pursuant to Section R315-260-43;

(2) The reclamation facility or intermediate facility shall satisfy the financial assurance condition in Subsection R315-261-4(a)(24)(vi)(F);

(3) The reclamation facility or intermediate facility shall not be subject to a formal enforcement action in the previous three years and not be classified as a significant non-complier, or shall provide credible evidence that the facility will manage the hazardous secondary materials properly. Credible evidence may include a demonstration that the facility has taken remedial steps to address the violations and prevent future violations, or that the violations are not relevant to the proper management of the hazardous secondary materials;

(4) The intermediate or reclamation facility shall have the equipment and trained personnel needed to safely manage the hazardous secondary material and shall meet emergency preparedness and response requirements under Sections R315-261-400 through 420;

(5) If residuals are generated from the reclamation of the excluded hazardous secondary materials, the reclamation facility shall have the permits required, if any, to manage the residuals, have a contract with an appropriately permitted facility to dispose of the residuals or present credible evidence that the residuals will be managed in a manner that is protective of human health and the environment, and

(6) The intermediate or reclamation facility shall address the potential for risk to proximate populations from unpermitted releases of the hazardous secondary material to the environment; i.e., releases that are not covered by a permit, such as a permit to discharge to water or air; which may include, but are not limited to, potential releases through surface transport by precipitation runoff, releases to soil and groundwater, wind-blown dust, fugitive air emissions, and catastrophic unit failures, and shall include consideration of potential cumulative risks from other nearby potential stressors.

R315-260-32. Reclassification as a Boiler.

In accordance with the standards and criteria in the definition of a boiler found in Section R315-260-10, and the procedures in Section R315-260-33, the Board may determine on a case-by-case basis that certain enclosed devices using controlled flame combustion are boilers, even though they do not otherwise meet the definition of boiler contained in Subsection R315-260-10, after considering the following

criteria:

- (a) The extent to which the unit has provisions for recovering and exporting thermal energy in the form of steam, heated fluids, or heated gases; and
- (b) The extent to which the combustion chamber and energy recovery equipment are of integral design; and
- (c) The efficiency of energy recovery, calculated in terms of the recovered energy compared with the thermal value of the fuel; and
- (d) The extent to which exported energy is utilized; and
- (e) The extent to which the device is in common and customary use as a "boiler" functioning primarily to produce steam, heated fluids, or heated gases; and
- (f) Other factors, as appropriate.

R315-260-33. Procedures for Exclusion from Classification as a Solid Waste, for Reclassification as a Boiler, or for Non-waste Determinations.

The Director shall use the following procedures in evaluating applications for exclusion from classification as a solid waste, applications to classify particular enclosed controlled flame combustion devices as boilers, or applications for non-waste determinations.

(a) The applicant shall apply to the Director for the exclusion, reclassification, or non-waste determination. The application shall address the relevant criteria contained in Sections R315-260-31, 32, or 34, as applicable.

(b) The Director shall evaluate the application and issue a draft notice tentatively granting or denying the application. Notification of this tentative decision shall be provided by newspaper advertisement or radio broadcast in the locality where the facility requesting the exclusion, reclassification, or non-waste determination is located. The Director shall accept comment on the tentative decision for 30 days, and may also hold a public hearing upon request or at the Director's discretion. The Director shall issue a final decision after receipt of comments and after the hearing, if any.

(c) In the event of a change in circumstances that affect how a hazardous secondary material meets the relevant criteria contained in Sections R315-260-31 or 34 upon which an exclusion determination or non-waste determination has been based, the applicant shall send a description of the change in circumstances to the Director. The Director may issue a determination that the hazardous secondary material continues to meet the relevant criteria of the exclusion determination or non-waste determination or may require the facility to re-apply for the exclusion determination or non-waste determination.

(d) Exclusion determinations and non-waste determinations shall be effective for a fixed term not to exceed ten years. No later than six months prior to the end of this term, facilities shall re-apply for an exclusion determination or non-waste determination. If a facility re-applies for an exclusion determination or non-waste determination within six months, the facility may continue to operate under an expired exclusion determination or non-waste determination until receiving a decision on their re-application from the Director.

(e) Facilities receiving an exclusion determination or non-waste determination shall provide notification as required by Section R315-260-42.

R315-260-34. Standards and Criteria for Non-Waste Determinations.

(a) An applicant may apply to the Director for a formal determination that a hazardous secondary material is not discarded and therefore not a solid waste. The determinations will be based on the criteria contained in Subsections R315-260-34(b) or (c), as applicable. If an application is denied, the hazardous secondary material might still be eligible for a solid waste variance or exclusion.

(b) The Director may grant a non-waste determination for hazardous secondary material which is reclaimed in a continuous industrial process if the applicant demonstrates that the hazardous secondary material is a part of the production process and is not discarded. The determination will be based on whether the hazardous secondary material is legitimately recycled as specified in Section R315-260-43 and on the following criteria:

(1) The extent that the management of the hazardous secondary material is part of the continuous primary production process and is not waste treatment;

(2) Whether the capacity of the production process would use the hazardous secondary material in a reasonable time frame and ensure that the hazardous secondary material will not be abandoned, for example, based on past practices, market factors, the nature of the hazardous secondary material, or any contractual arrangements;

(3) Whether the hazardous constituents in the hazardous secondary material are reclaimed rather than released to the air, water or land at significantly higher levels from either a statistical or from a health and environmental risk perspective than would otherwise be released by the production process; and

(4) Other relevant factors that demonstrate the hazardous secondary material is not discarded, including why the hazardous secondary material cannot meet, or should not have to meet, the conditions of an exclusion under Sections R315-261-2 or 4.

(c) The Director may grant a non-waste determination for hazardous secondary material which is indistinguishable in all relevant aspects from a product or intermediate if the applicant demonstrates that the hazardous secondary material is comparable to a product or intermediate and is not discarded. The determination will be based on whether the hazardous secondary material is legitimately recycled as specified in Section R315-260-43 and on the following criteria:

(1) Whether market participants treat the hazardous secondary material as a product or intermediate rather than a waste, for example, based on the current positive value of the hazardous secondary material, stability of demand, or any contractual arrangements;

(2) Whether the chemical and physical identity of the hazardous secondary material is comparable to commercial products or intermediates;

(3) Whether the capacity of the market would use the hazardous secondary material in a reasonable time frame and ensure that the hazardous secondary material will not be abandoned, for example, based on past practices, market factors, the nature of the hazardous secondary material, or any contractual arrangements;

(4) Whether the hazardous constituents in the hazardous secondary material are reclaimed rather than released to the air, water or land at significantly higher levels from either a statistical or from a health and environmental risk perspective than would otherwise be released by the production process; and

(5) Other relevant factors that demonstrate the hazardous secondary material is not discarded, including why the hazardous secondary material cannot meet, or should not have to meet, the conditions of an exclusion under Sections R315-261-2 or 4.

R315-260-40. Additional Regulation of Certain Hazardous Waste Recycling Activities on a Case-by-Case Basis.

(a) The Director may decide on a case-by-case basis that persons accumulating or storing the recyclable materials described in Subsection R315-261-6(a)(2)(iii) should be regulated under Subsection R315-261-6(b) and (c). The basis for this decision is that the materials are being accumulated or stored in a manner that does not protect human health and the environment because the materials or their toxic constituents

have not been adequately contained, or because the materials being accumulated or stored together are incompatible. In making this decision, the Director shall consider the following factors:

- (1) The types of materials accumulated or stored and the amounts accumulated or stored;
 - (2) The method of accumulation or storage;
 - (3) The length of time the materials have been accumulated or stored before being reclaimed;
 - (4) Whether any contaminants are being released into the environment, or are likely to be so released; and
 - (5) Other relevant factors.
- (2) The procedures for this decision are set forth in R315-260-41.

R315-260-41. Procedures for Case-by-Case Regulation of Hazardous Waste Recycling Activities.

The Director shall use the following procedures when determining whether to regulate hazardous waste recycling activities described in Subsection R315-261-6(a)(2)(iii) under the provisions of Subsection R315-261-6(b) and (c), rather than under the provisions of Section R315-266-70.

(a) If a generator is accumulating the waste, the Director shall issue a notice setting forth the factual basis for the decision and stating that the person shall comply with the applicable requirements of Sections R315-262-10 through 12, R315-262-30 through 34, R315-262-40 through 44, and R315-262-50 through 58. The notice shall become final within 30 days, unless a request for agency action is made under the requirements of the Administrative Procedures Act.

(b) If the person is accumulating the recyclable material as a storage facility, the notice will state that the person shall obtain a permit in accordance with all applicable provisions of Rule R315-270 and 124. The owner or operator of the facility shall apply for a permit within no less than 60 days and no more than six months of notice, as specified in the notice. If the owner or operator of the facility wishes to challenge the Director's decision, he may do so in accordance with the Administrative Procedures Act.

R315-260-42. Notification Requirement for Hazardous Secondary Materials.

(a) Facilities managing hazardous secondary materials under Subsections R315-260-30, or Subsections R315-261-4(a)(23), (24), or (27) shall send a notification prior to operating under the exclusion(s) and by March 1 of each even numbered year thereafter to the Director using EPA Form 8700-12 that includes the following information:

- (1) The name, address, and EPA ID number, if applicable, of the facility;
 - (2) The name and telephone number of a contact person;
 - (3) The NAICS code of the facility;
 - (4) The regulation under which the hazardous secondary materials shall be managed;
 - (5) When the facility began or expects to begin managing the hazardous secondary materials in accordance with the regulation;
 - (6) A list of hazardous secondary materials that shall be managed according to the regulation, reported as the EPA hazardous waste numbers that would apply if the hazardous secondary materials were managed as hazardous wastes;
 - (7) For each hazardous secondary material, whether the hazardous secondary material, or any portion thereof, will be managed in a land-based unit;
 - (8) The quantity of each hazardous secondary material to be managed annually; and
 - (9) The certification, included in EPA Form 8700-12, signed and dated by an authorized representative of the facility.
- (b) If a facility managing hazardous secondary materials

has submitted a notification, but then subsequently stops managing hazardous secondary materials in accordance with the regulation(s) listed above, the facility shall notify the Director within thirty days using EPA Form 8700-12. For purposes of Section R315-260-42, a facility has stopped managing hazardous secondary materials if the facility no longer generates, manages and/or reclaims hazardous secondary materials under the regulation(s) above and does not expect to manage any amount of hazardous secondary materials for at least 1 year.

R315-260-43. Legitimate Recycling of Hazardous Secondary Materials.

(a) Recycling of hazardous secondary materials for the purpose of the exclusions or exemptions from the hazardous waste regulations shall be legitimate. Hazardous secondary material that is not legitimately recycled is discarded material and is a solid waste. In determining if their recycling is legitimate, persons shall address all the requirements of Subsections R315-260-43(a)(1) through (4).

(1) Legitimate recycling shall involve a hazardous secondary material that provides a useful contribution to the recycling process or to a product or intermediate of the recycling process. The hazardous secondary material provides a useful contribution if it:

- (i) Contributes valuable ingredients to a product or intermediate; or
- (ii) Replaces a catalyst or carrier in the recycling process; or
- (iii) Is the source of a valuable constituent recovered in the recycling process; or
- (iv) Is recovered or regenerated by the recycling process; or
- (v) Is used as an effective substitute for a commercial product.

(2) The recycling process shall produce a valuable product or intermediate. The product or intermediate is valuable if it is:

- (i) Sold to a third party; or
- (ii) Used by the recycler or the generator as an effective substitute for a commercial product or as an ingredient or intermediate in an industrial process.

(3) The generator and the recycler shall manage the hazardous secondary material as a valuable commodity when it is under their control. Where there is an analogous raw material, the hazardous secondary material shall be managed, at a minimum, in a manner consistent with the management of the raw material or in an equally protective manner. Where there is no analogous raw material, the hazardous secondary material shall be contained. Hazardous secondary materials that are released to the environment and are not recovered immediately are discarded.

(4) The product of the recycling process shall be comparable to a legitimate product or intermediate:

(i) Where there is an analogous product or intermediate, the product of the recycling process is comparable to a legitimate product or intermediate if:

(A) The product of the recycling process does not exhibit a hazardous characteristic, as defined in Sections R315-261-20 through 24, that analogous products do not exhibit, and

(B) The concentrations of any hazardous constituents found in appendix VIII of Rule R315-261 that are in the product or intermediate are at levels that are comparable to or lower than those found in analogous products or at levels that meet widely-recognized commodity standards and specifications, in the case where the commodity standards and specifications include levels that specifically address those hazardous constituents.

(ii) Where there is no analogous product, the product of the recycling process is comparable to a legitimate product or intermediate if:

(A) The product of the recycling process is a commodity that meets widely recognized commodity standards and specifications, e.g., commodity specification grades for common metals, or

(B) The hazardous secondary materials being recycled are returned to the original process or processes from which they were generated to be reused, e.g., closed loop recycling.

(iii) If the product of the recycling process has levels of hazardous constituents that are not comparable to or unable to be compared to a legitimate product or intermediate per Subsection R315-260-43(a)(4)(i) or (ii), the recycling still may be shown to be legitimate, if it meets the following specified requirements. The person performing the recycling shall conduct the necessary assessment and prepare documentation showing why the recycling is, in fact, still legitimate. The recycling can be shown to be legitimate based on lack of exposure from toxics in the product, lack of the bioavailability of the toxics in the product, or other relevant considerations which show that the recycled product does not contain levels of hazardous constituents that pose a significant human health or environmental risk. The documentation shall include a certification statement that the recycling is legitimate and shall be maintained on-site for three years after the recycling operation has ceased. The person performing the recycling shall notify the Director of this activity using EPA Form 8700-12.

KEY: hazardous waste
August 31, 2017

19-1-301
19-6-105
19-6-106

R315. Environmental Quality, Waste Management and Radiation Control, Waste Management.

R315-261. General Requirements -- Identification and Listing of Hazardous Waste.

R315-261-1. Purpose and Scope.

(a) This rule identifies those solid wastes which are subject to regulation as hazardous wastes under Rules R315-262 through 265, 268, 270, and 124 and which are subject to the notification requirements of these rules.

(1) Sections R315-261-1 through 9 define the terms "solid waste" and "hazardous waste", identify those wastes which are excluded from regulation under Rules R315-262 through R315-266, R315-268 and R315-270 and establish special management requirements for hazardous waste produced by very small quantity generators and hazardous waste which is recycled.

(2) Sections R315-261-10 and 11 set forth the criteria used to identify characteristics of hazardous waste and to list particular hazardous wastes.

(3) Sections R315-261-20 through 24 identify characteristics of hazardous waste.

(4) Sections R315-261-30 through 35 list particular hazardous wastes.

(b)(1) The definition of solid waste contained in this rule applies only to wastes that also are hazardous for purposes of the rules implementing Title 19 Chapter 6. For example, it does not apply to materials such as non-hazardous scrap, paper, textiles, or rubber that are not otherwise hazardous wastes and that are recycled.

(2) Rule R315-261 identifies only some of the materials which are solid wastes and hazardous wastes under the Utah Solid and Hazardous Waste Act. A material which is not defined as a solid waste in Rule R315-261, or is not a hazardous waste identified or listed in Rule R315-261, is still a solid waste and a hazardous waste for purposes of these sections if:

(i) In the case of section 19-6-109, the Director has reason to believe that the material may be a solid waste within the meaning of Subsection 19-6-102(13) and a hazardous waste within the meaning of Subsection 19-6-102(7) or

(ii) In the case of section 19-6-115, the material is presenting an imminent and substantial danger to human health or the environment.

(c) For the purposes of Sections R315-261-2 and 261-6:

(1) A "spent material" is any material that has been used and as a result of contamination can no longer serve the purpose for which it was produced without processing;

(2) "Sludge" has the same meaning used in Section R315-260-10;

(3) A "by-product" is a material that is not one of the primary products of a production process and is not solely or separately produced by the production process. Examples are process residues such as slags or distillation column bottoms. The term does not include a co-product that is produced for the general public's use and is ordinarily used in the form it is produced by the process.

(4) A material is "reclaimed" if it is processed to recover a usable product, or if it is regenerated. Examples are recovery of lead values from spent batteries and regeneration of spent solvents. In addition, for purposes of Subsections R315-261-4(a)(23), and (24) smelting, melting and refining furnaces are considered to be solely engaged in metals reclamation if the metal recovery from the hazardous secondary materials meets the same requirements as those specified for metals recovery from hazardous waste found in Subsection R315-266-100(d)(1) through (3), and if the residuals meet the requirements specified in Section R315-266-112.

(5) A material is "used or reused" if it is either:

(i) Employed as an ingredient, including use as an intermediate, in an industrial process to make a product, for example, distillation bottoms from one process used as

feedstock in another process. However, a material will not satisfy this condition if distinct components of the material are recovered as separate end products, as when metals are recovered from metal-containing secondary materials; or

(ii) Employed in a particular function or application as an effective substitute for a commercial product, for example, spent pickle liquor used as phosphorous precipitant and sludge conditioner in wastewater treatment.

(6) "Scrap metal" is bits and pieces of metal parts; for example bars, turnings, rods, sheets, or wire; or metal pieces that may be combined together with bolts or soldering; for example radiators, scrap automobiles, or railroad box cars; which when worn or superfluous can be recycled.

(7) A material is "recycled" if it is used, reused, or reclaimed.

(8) A material is "accumulated speculatively" if it is accumulated before being recycled. A material is not accumulated speculatively, however, if the person accumulating it can show that the material is potentially recyclable and has a feasible means of being recycled; and that during the calendar year, commencing on January 1, the amount of material that is recycled, or transferred to a different site for recycling, equals at least 75 percent by weight or volume of the amount of that material accumulated at the beginning of the period. Materials shall be placed in a storage unit with a label indicating the first date that the material began to be accumulated. If placing a label on the storage unit is not practicable, the accumulation period shall be documented through an inventory log or other appropriate method. In calculating the percentage of turnover, the 75 percent requirement is to be applied to each material of the same type, e.g., slags from a single smelting process, that is recycled in the same way, i.e., from which the same material is recovered or that is used in the same way. Materials accumulating in units that would be exempt from regulation under Subsection R315-261-4(c) are not to be included in making the calculation. Materials that are already defined as solid wastes also are not to be included in making the calculation. Materials are no longer in this category once they are removed from accumulation for recycling, however.

(9) "Excluded scrap metal" is processed scrap metal, unprocessed home scrap metal, and unprocessed prompt scrap metal.

(10) "Processed scrap metal" is scrap metal which has been manually or physically altered to either separate it into distinct materials to enhance economic value or to improve the handling of materials. Processed scrap metal includes, but is not limited to scrap metal which has been baled, shredded, sheared, chopped, crushed, flattened, cut, melted, or separated by metal type, i.e., sorted, and, fines, drosses and related materials which have been agglomerated. Note: shredded circuit boards being sent for recycling are not considered processed scrap metal. They are covered under the exclusion from the definition of solid waste for shredded circuit boards being recycled Subsection R315-261-4(a)(14).

(11) "Home scrap metal" is scrap metal as generated by steel mills, foundries, and refineries such as turnings, cuttings, punchings, and borings.

(12) "Prompt scrap metal" is scrap metal as generated by the metal working/fabrication industries and includes such scrap metal as turnings, cuttings, punchings, and borings. Prompt scrap is also known as industrial or new scrap metal.

R315-261-2. Definition of Solid Waste.

(a)(1) A solid waste is any discarded material that is not excluded by Subsection R315-261-4(a) or that is not excluded under Sections R315-260-30 and R315-260-31 or that is not excluded by a non-waste determination under Sections R315-260-30 and R315-260-34.

(2)(i) A discarded material is any material which is:

(A) Abandoned, as explained in Subsection R315-261-2(b); or

(B) Recycled, as explained in Subsection R315-261-2(c); or

(C) Considered inherently waste-like, as explained in Subsection R315-261-2(d).

(b) Materials are solid waste if they are abandoned by being:

(1) Disposed of; or

(2) Burned or incinerated; or

(3) Accumulated, stored, or treated, but not recycled, before or in lieu of being abandoned by being disposed of, burned, or incinerated; or

(4) Sham recycled, as explained in Subsection R315-261-2(g)

(c) Materials are solid wastes if they are recycled-or accumulated, stored, or treated before recycling-as specified in Subsections R315-261-2(c)(1) through (4).

(1) Used in a manner constituting disposal.

(i) Materials noted with a "*" in Column 1 of Table 1 are solid wastes when they are:

(A) Applied to or placed on the land in a manner that constitutes disposal; or

(B) Used to produce products that are applied to or placed on the land or are otherwise contained in products that are applied to or placed on the land (in which cases the product itself remains a solid waste).

(ii) However, commercial chemical products listed in Section R315-261-33 are not solid wastes if they are applied to the land and that is their ordinary manner of use.

(2) Burning for energy recovery.

(i) Materials noted with a "*" in column 2 of Table 1 are solid wastes when they are:

(A) Burned to recover energy;

(B) Used to produce a fuel or are otherwise contained in fuels, in which cases the fuel itself remains a solid waste.

(ii) However, commercial chemical products listed in Section R315-261-33 are not solid wastes if they are themselves fuels.

(3) Reclaimed. Materials noted with a "-" in column 3 of Table 1 are not solid wastes when reclaimed. Materials noted with an "*" in column 3 of Table 1 are solid wastes when reclaimed unless they meet the requirements of Subsections R315-261-4(a)(17), or R315-261-4(a)(23), R315-261-4(a)(24) or R35-261-4(a)(27).

(4) Accumulated speculatively. Materials noted with a "*" in column 4 of Table 1 are solid wastes when accumulated speculatively.

(listed in 261-31 or 261-32

By-products exhibiting a characteristic of hazardous waste (*) (*) - (*)

Commercial chemical products listed in 261-33 (*) (*)

Scrap metal that is not excluded under 261-4(a)(13) (*) (*) (*) (*)

Note 1: All rule references in Table 1 are to R315.
 Note 2: The terms "spent materials," "sludges," "by-products," and "scrap metal" and "processed scrap metal" are defined in Section R315-261-1.

(d) Inherently waste-like materials. The following materials are solid wastes when they are recycled in any manner:

(1) Hazardous Waste Nos. F020; F021, unless used as an ingredient to make a product at the site of generation; F022; F023; F026; and F028.

(2) Secondary materials fed to a halogen acid furnace that exhibit a characteristic of a hazardous waste or are listed as a hazardous waste as defined in Sections R315-261-20 through 24 and 30 through 35, except for brominated material that meets the following criteria:

(i) The material shall contain a bromine concentration of at least 45%; and

(ii) The material shall contain less than a total of 1% of toxic organic compounds listed in Rule R315-261 appendix VIII; and

(iii) The material is processed continually on-site in the halogen acid furnace via direct conveyance, hard piping.

(3) The Board shall use the following criteria to add wastes to Subsection R315-261-2(d)(1) or (2):

(i)(A) The materials are ordinarily disposed of, burned, or incinerated; or

(B) The materials contain toxic constituents listed in appendix VIII of Rule R315-261 and these constituents are not ordinarily found in raw materials or products for which the materials substitute (or are found in raw materials or products in smaller concentrations) and are not used or reused during the recycling process; and

(ii) The material may pose a substantial hazard to human health and the environment when recycled.

(e) Materials that are not solid waste when recycled.

(1) Materials are not solid wastes when they can be shown to be recycled by being:

(i) Used or reused as ingredients in an industrial process to make a product, provided the materials are not being reclaimed; or

(ii) Used or reused as effective substitutes for commercial products; or

(iii) Returned to the original process from which they are generated, without first being reclaimed or land disposed. The material shall be returned as a substitute for feedstock materials. In cases where the original process to which the material is returned is a secondary process, the materials shall be managed such that there is no placement on the land. In cases where the materials are generated and reclaimed within the primary mineral processing industry, the conditions of the exclusion found at Subsection R315-261-4(a)(17) apply rather than Subsection R315-261-2(e)(1)(iii).

(2) The following materials are solid wastes, even if the recycling involves use, reuse, or return to the original process described in Subsections R315-261-2(e)(1)(i) through (iii):

Table 1

	Use Constituting Disposal 261-2(c)(1)	Energy recovery/fuel 261-2(c)(2)	Reclamation 261-2(c)(3) except as provided in 261-4(a)(17) 261-4(a)(23) 261-4(a)(24) or 261-4(a)(27)	Speculative accumulation 261-2(c)(4)
	1	2	3	4
Spent Materials	(*)	(*)	(*)	(*)
Sludges (listed in 261-31 or 261-32)	(*)	(*)	(*)	(*)
Sludges exhibiting a characteristic of hazardous waste	(*)	(*)	-	(*)
By-products	(*)	(*)	(*)	(*)

- (i) Materials used in a manner constituting disposal, or used to produce products that are applied to the land; or
- (ii) Materials burned for energy recovery, used to produce a fuel, or contained in fuels; or
- (iii) Materials accumulated speculatively; or
- (iv) Materials listed in Subsections R315-261-2(d)(1) and (d)(2).
- (f) Documentation of claims that materials are not solid wastes or are conditionally exempt from regulation. Respondents in actions to enforce rules implementing Sections 19-6-101 through 125 who raise a claim that a certain material is not a solid waste, or is conditionally exempt from regulation, shall demonstrate that there is a known market or disposition for the material, and that they meet the terms of the exclusion or exemption. In doing so, they shall provide appropriate documentation, such as contracts showing that a second person uses the material as an ingredient in a production process, to demonstrate that the material is not a waste, or is exempt from regulation. In addition, owners or operators of facilities claiming that they actually are recycling materials shall show that they have the necessary equipment to do so.
- (g) Sham recycling. A hazardous secondary material found to be sham recycled is considered discarded and a solid waste. Sham recycling is recycling that is not legitimate recycling as defined in Section R315-260-43.

R315-261-3. Definition of Hazardous Waste.

(a) A solid waste, as defined in Section R315-261-2, is a hazardous waste if:

(1) It is not excluded from regulation as a hazardous waste under Subsection R315-261-4(b); and

(2) It meets any of the following criteria:

(i) It exhibits any of the characteristics of hazardous waste identified in Sections R315-261-20 through 24. However, any mixture of a waste from the extraction, beneficiation, and processing of ores and minerals excluded under Subsection R315-261-4(b)(7) and any other solid waste exhibiting a characteristic of hazardous waste under Sections R315-261-20 through 24 is a hazardous waste only if it exhibits a characteristic that would not have been exhibited by the excluded waste alone if such mixture had not occurred, or if it continues to exhibit any of the characteristics exhibited by the non-excluded wastes prior to mixture. Further, for the purposes of applying the Toxicity Characteristic to such mixtures, the mixture is also a hazardous waste if it exceeds the maximum concentration for any contaminant listed in table 1 to Section R315-261-24 that would not have been exceeded by the excluded waste alone if the mixture had not occurred or if it continues to exceed the maximum concentration for any contaminant exceeded by the nonexempt waste prior to mixture.

(ii) It is listed in Sections R315-261-30 through 35 and has not been excluded from the lists in Sections R315-261-30 through 35 under Sections R315-260-.20 and R315-260-22.

(iii) (Reserved)

(iv) It is a mixture of solid waste and one or more hazardous wastes listed in Sections R315-261-30 through 35 and has not been excluded from Subsection R315-261-3(a)(2) under Sections R315-260-20 and R315-260-22, Subsection R315-261-3(g), or Subsection R315-261-3(h); however, the following mixtures of solid wastes and hazardous wastes listed in Sections R315-261-30 through 35 are not hazardous wastes, except by application of Subsections R315-261-3(a)(2)(i) or (ii), if the generator can demonstrate that the mixture consists of wastewater the discharge of which is subject to regulation under either section 402 or section 307(b) of the Clean Water Act, including wastewater at facilities which have eliminated the discharge of wastewater, and;

(A) One or more of the following spent solvents listed in Section R315-261-31: benzene, carbon tetrachloride,

tetrachloroethylene, trichloroethylene or the scrubber waters derived-from the combustion of these spent solvents-Provided, That the maximum total weekly usage of these solvents, other than the amounts that can be demonstrated not to be discharged to wastewater, divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pretreatment system does not exceed 1 part per million, or the total measured concentration of these solvents entering the headworks of the facility's wastewater treatment system, at facilities subject to regulation under the Utah Air Conservation Act, or at facilities subject to an enforceable limit in a federal operating permit that minimizes fugitive emissions, does not exceed 1 part per million on an average weekly basis. Any facility that uses benzene as a solvent and claims this exemption shall use an aerated biological wastewater treatment system and shall use only lined surface impoundments or tanks prior to secondary clarification in the wastewater treatment system. Facilities that choose to measure concentration levels shall file a copy of their sampling and analysis plan with the Director. A facility shall file a copy of a revised sampling and analysis plan only if the initial plan is rendered inaccurate by changes in the facility's operations. The sampling and analysis plan shall include the monitoring point location (headworks), the sampling frequency and methodology, and a list of constituents to be monitored. A facility is eligible for the direct monitoring option once they receive confirmation that the sampling and analysis plan has been received by the Director. The Director may reject the sampling and analysis plan if the Director finds that, the sampling and analysis plan fails to include the above information; or the plan parameters would not enable the facility to calculate the weekly average concentration of these chemicals accurately. If the Director rejects the sampling and analysis plan or if the Director finds that the facility is not following the sampling and analysis plan, the Director shall notify the facility to cease the use of the direct monitoring option until such time as the bases for rejection are corrected; or

(B) One or more of the following spent solvents listed in Section R315-261-31: methylene chloride, 1,1,1-trichloroethane, chlorobenzene, o-dichlorobenzene, cresols, cresylic acid, nitrobenzene, toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, spent chlorofluorocarbon solvents, 2-ethoxyethanol, or the scrubber waters derived-from the combustion of these spent solvents-Provided That the maximum total weekly usage of these solvents, other than the amounts that can be demonstrated not to be discharged to wastewater, divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pretreatment system does not exceed 25 parts per million, or the total measured concentration of these solvents entering the headworks of the facility's wastewater treatment system; at facilities subject to regulation under the Utah Air Conservation Act, or at facilities subject to an enforceable limit in a federal operating permit that minimizes fugitive emissions; does not exceed 25 parts per million on an average weekly basis. Facilities that choose to measure concentration levels shall file a copy of their sampling and analysis plan with the Director. A facility shall file a copy of a revised sampling and analysis plan only if the initial plan is rendered inaccurate by changes in the facility's operations. The sampling and analysis plan shall include the monitoring point location (headworks), the sampling frequency and methodology, and a list of constituents to be monitored. A facility is eligible for the direct monitoring option once they receive confirmation that the sampling and analysis plan has been received by the Director. The Director may reject the sampling and analysis plan if the Director finds that, the sampling and analysis plan fails to include the above information; or the plan parameters would not enable the facility to calculate the weekly average concentration of these chemicals

accurately. If the Director rejects the sampling and analysis plan or if the Director finds that the facility is not following the sampling and analysis plan, the Director shall notify the facility to cease the use of the direct monitoring option until such time as the bases for rejection are corrected; or

(C) One of the following wastes listed in Section R315-261-32, provided that the wastes are discharged to the refinery oil recovery sewer before primary oil/water/solids separation-heat exchanger bundle cleaning sludge from the petroleum refining industry, EPA Hazardous Waste No. K050; crude oil storage tank sediment from petroleum refining operations, EPA Hazardous Waste No. K169; clarified slurry oil tank sediment and/or in-line filter/separation solids from petroleum refining operations, EPA Hazardous Waste No. K170; spent hydrotreating catalyst, EPA Hazardous Waste No. K171; and spent hydrorefining catalyst, EPA Hazardous Waste No. K172; or

(D) A discarded hazardous waste, commercial chemical product, or chemical intermediate listed in Sections R315-261-31 through R315-261-33, arising from de minimis losses of these materials. For purposes of this Subsection R315-261-3(a)(2)(iv)(D), de minimis losses are inadvertent releases to a wastewater treatment system, including those from normal material handling operations, e.g., spills from the unloading or transfer of materials from bins or other containers, leaks from pipes, valves or other devices used to transfer materials; minor leaks of process equipment, storage tanks or containers; leaks from well maintained pump packings and seals; sample purgings; relief device discharges; discharges from safety showers and rinsing and cleaning of personal safety equipment; and rinsate from empty containers or from containers that are rendered empty by that rinsing. Any manufacturing facility that claims an exemption for de minimis quantities of wastes listed in Sections R315-261-31 through R315-261-32, or any nonmanufacturing facility that claims an exemption for de minimis quantities of wastes listed in Sections R315-261-30 through 35 shall either have eliminated the discharge of wastewaters or have included in its Clean Water Act permit application or submission to its pretreatment control authority the constituents for which each waste was listed in Rule R315-261 appendix VII; and the constituents in the table "Treatment Standards for Hazardous Wastes" in Section R315-268-40 for which each waste has a treatment standard (i.e., Land Disposal Restriction constituents). A facility is eligible to claim the exemption once the permit writer or control authority has been notified of possible de minimis releases via the Clean Water Act permit application or the pretreatment control authority submission. A copy of the Clean Water permit application or the submission to the pretreatment control authority shall be placed in the facility's on-site files; or

(E) Wastewater resulting from laboratory operations containing toxic (T) wastes listed in Sections R315-261-30 through 35. Provided, That the annualized average flow of laboratory wastewater does not exceed one percent of total wastewater flow into the headworks of the facility's wastewater treatment or pre-treatment system or provided the wastes, combined annualized average concentration does not exceed one part per million in the headworks of the facility's wastewater treatment or pre-treatment facility. Toxic wastes used in laboratories that are demonstrated not to be discharged to wastewater are not to be included in this calculation; or

(F) One or more of the following wastes listed in Section R315-261.32: wastewaters from the production of carbamates and carbamoyl oximes, EPA Hazardous Waste No. K157 - Provided that the maximum weekly usage of formaldehyde, methyl chloride, methylene chloride, and triethylamine, including all amounts that cannot be demonstrated to be reacted in the process, destroyed through treatment, or is recovered, i.e., what is discharged or volatilized, divided by the average weekly

flow of process wastewater prior to any dilution into the headworks of the facility's wastewater treatment system does not exceed a total of 5 parts per million by weight or the total measured concentration of these chemicals entering the headworks of the facility's wastewater treatment system (at facilities subject to regulation under the Utah Air Conservation Act, or at facilities subject to an enforceable limit in a federal operating permit that minimizes fugitive emissions), does not exceed 5 parts per million on an average weekly basis. Facilities that choose to measure concentration levels shall file copy of their sampling and analysis plan with the Director. A facility shall file a copy of a revised sampling and analysis plan only if the initial plan is rendered inaccurate by changes in the facility's operations. The sampling and analysis plan shall include the monitoring point location (headworks), the sampling frequency and methodology, and a list of constituents to be monitored. A facility is eligible for the direct monitoring option once they receive confirmation that the sampling and analysis plan has been received by the Director. The Director may reject the sampling and analysis plan if the Director finds that, the sampling and analysis plan fails to include the above information; or the plan parameters would not enable the facility to calculate the weekly average concentration of these chemicals accurately. If the Director rejects the sampling and analysis plan or if the Director finds that the facility is not following the sampling and analysis plan, the Director shall notify the facility to cease the use of the direct monitoring option until such time as the bases for rejection are corrected; or

(G) Wastewaters derived-from the treatment of one or more of the following wastes listed in Section R315-261-32: organic waste, including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates, from the production of carbamates and carbamoyl oximes, EPA Hazardous Waste No. K156. Provided, that the maximum concentration of formaldehyde, methyl chloride, methylene chloride, and triethylamine prior to any dilutions into the headworks of the facility's wastewater treatment system does not exceed a total of 5 milligrams per liter or the total measured concentration of these chemicals entering the headworks of the facility's wastewater treatment system (at facilities subject to regulation under the Utah Air Conservation Act, or at facilities subject to an enforceable limit in a federal operating permit that minimizes fugitive emissions), does not exceed 5 milligrams per liter on an average weekly basis. Facilities that choose to measure concentration levels shall file copy of their sampling and analysis plan with the Director. A facility shall file a copy of a revised sampling and analysis plan only if the initial plan is rendered inaccurate by changes in the facility's operations. The sampling and analysis plan shall include the monitoring point location (headworks), the sampling frequency and methodology, and a list of constituents to be monitored. A facility is eligible for the direct monitoring option once they receive confirmation that the sampling and analysis plan has been received by the Director. The Director may reject the sampling and analysis plan if the Director finds that, the sampling and analysis plan fails to include the above information; or the plan parameters would not enable the facility to calculate the weekly average concentration of these chemicals accurately. If the Director rejects the sampling and analysis plan or if the Director finds that the facility is not following the sampling and analysis plan, the Director shall notify the facility to cease the use of the direct monitoring option until such time as the bases for rejection are corrected.

(v) Rebuttable presumption for used oil. Used oil containing more than 1000 ppm total halogens is presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste listed in Sections R315-261-30 through 35. Persons may rebut this presumption by demonstrating that the used oil does not contain hazardous

waste; for example, to show that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in appendix VIII of Rule R315-261.

(A) The rebuttable presumption does not apply to metalworking oils/fluids containing chlorinated paraffins, if they are processed, through a tolling agreement, to reclaim metalworking oils/fluids. The presumption does apply to metalworking oils/fluids if such oils/fluids are recycled in any other manner, or disposed.

(B) The rebuttable presumption does not apply to used oils contaminated with chlorofluorocarbons (CFCs) removed from refrigeration units where the CFCs are destined for reclamation. The rebuttable presumption does apply to used oils contaminated with CFCs that have been mixed with used oil from sources other than refrigeration units.

(b) A solid waste which is not excluded from regulation under Subsection R315-261-3(a)(1) becomes a hazardous waste when any of the following events occur:

(1) In the case of a waste listed in Sections R315-261-30 through 35, when the waste first meets the listing description set forth in R315-261-30 through 35.

(2) In the case of a mixture of solid waste and one or more listed hazardous wastes, when a hazardous waste listed in R315-261-30 through 35 is first added to the solid waste.

(3) In the case of any other waste, including a waste mixture, when the waste exhibits any of the characteristics identified in Sections R315-261-20 through 24.

(c) Unless and until it meets the criteria of Subsection R315-261-3(d):

(1) A hazardous waste shall remain a hazardous waste.

(2)(i) Except as otherwise provided in Subsections R315-261-3(c)(2)(ii), or (g), any solid waste generated from the treatment, storage, or disposal of a hazardous waste, including any sludge, spill residue, ash emission control dust, or leachate, but not including precipitation run-off, is a hazardous waste. However, materials that are reclaimed from solid wastes and that are used beneficially are not solid wastes and hence are not hazardous wastes under this provision unless the reclaimed material is burned for energy recovery or used in a manner constituting disposal.

(ii) The following solid wastes are not hazardous even though they are generated from the treatment, storage, or disposal of a hazardous waste, unless they exhibit one or more of the characteristics of hazardous waste:

(A) Waste pickle liquor sludge generated by lime stabilization of spent pickle liquor from the iron and steel industry, SIC Codes 331 and 332.

(B) Waste from burning any of the materials exempted from regulation by Subsection R315-261-6(a)(3)(iii) and (iv).

(C)(I) Nonwastewater residues, such as slag, resulting from high temperature metals recovery processing of K061, K062 or F006 waste, in units identified as rotary kilns, flame reactors, electric furnaces, plasma arc furnaces, slag reactors, rotary hearth furnace/electric furnace combinations or industrial furnaces, as defined in Section R315-260-10, that are disposed in solid waste landfills regulated under Rules R315-301 through R315-320, provided that these residues meet the generic exclusion levels identified in the tables below for all constituents, and exhibit no characteristics of hazardous waste. Testing requirements shall be incorporated in a facility's waste analysis plan or a generator's self-implementing waste analysis plan; at a minimum, composite samples of residues shall be collected and analyzed quarterly and/or when the process or operation generating the waste changes. Persons claiming this exclusion in an enforcement action shall have the burden of proving by clear and convincing evidence that the material meets all of the exclusion requirements.

TABLE

Constituent Maximum for any single composite sample - TCLP (mg/l)

Generic exclusion levels for K061 and K062 nonwastewater high temperature metals recovery residues

Antimony	0.10
Arsenic	0.50
Barium	7.6
Beryllium	0.010
Cadmium	0.050
Chromium (total)	0.33
Lead	0.15
Mercury	0.009
Nickel	1.0
Selenium	0.16
Silver	0.30
Thallium	0.020
Zinc	70

Generic exclusion levels for F006 nonwastewater high temperature metals recovery residues

Antimony	0.10
Arsenic	0.50
Barium	7.6
Beryllium	0.010
Cadmium	0.050
Chromium (total)	0.33
Cyanide (total) (mg/kg)	1.8
Lead	0.15
Mercury	0.009
Nickel	1.0
Selenium	0.16
Silver	0.30
Thallium	0.020
Zinc	70

(2) A one-time notification and certification shall be placed in the facility's files and sent to the Director for K061, K062 or F006 high temperature metals recovery residues that meet the generic exclusion levels for all constituents and do not exhibit any characteristics that are sent to solid waste landfills regulated under Rules R315-301 through R315-320. The notification and certification that is placed in the generators or treaters files shall be updated if the process or operation generating the waste changes and/or if the landfill receiving the waste changes. However, the generator or treater need only notify the Director on an annual basis if such changes occur. Such notification and certification should be sent to the Director by the end of the calendar year, but no later than December 31. The notification shall include the following information: The name and address of the solid waste landfill regulated under Rules R315-301 through R315-320 receiving the waste shipments; the EPA Hazardous Waste Number(s) and treatability group(s) at the initial point of generation; and, the treatment standards applicable to the waste at the initial point of generation. The certification shall be signed by an authorized representative and shall state as follows: "I certify under penalty of law that the generic exclusion levels for all constituents have been met without impermissible dilution and that no characteristic of hazardous waste is exhibited. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

(D) Biological treatment sludge from the treatment of one of the following wastes listed in Section R315-261-32: organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes, EPA Hazardous Waste No. K156, and wastewaters from the production of carbamates and carbamoyl oximes, EPA Hazardous Waste No. K157.

(E) Catalyst inert support media separated from one of the following wastes listed in Section R315-261-32: - Spent hydrotreating catalyst, EPA Hazardous Waste No. K171), and Spent hydrorefining catalyst (EPA Hazardous Waste No. K172.

(d) Any solid waste described in Subsection R315-261-3(c) is not a hazardous waste if it meets the following criteria:

(1) In the case of any solid waste, it does not exhibit any of the characteristics of hazardous waste identified in Sections R315-261-20 through 24. However, wastes that exhibit a characteristic at the point of generation may still be subject to the requirements of Rule R315-268, even if they no longer exhibit a characteristic at the point of land disposal.

(2) In the case of a waste which is a listed waste under Sections R315-261-30 through 35, contains a waste listed under Sections R315-261-30 through 35 or is derived from a waste listed in Sections R315-261-30 through 35, it also has been excluded from Subsection R315-261-3(c) under Sections R315-260-20 and R315-260-22.

(e) (Reserved)

(f) Notwithstanding Subsections R315-261-3(a) through (d) and provided the debris as defined in Rule R315-268 does not exhibit a characteristic identified in Sections R315-261-20 through 24, the following materials are not subject to regulation under Rules R315-260 through 266, R315-268, or R315-270:

(1) Hazardous debris as defined in Rule R315-268 that has been treated using one of the required extraction or destruction technologies specified in Table 1 of Section R315-268-45; persons claiming this exclusion in an enforcement action shall have the burden of proving by clear and convincing evidence that the material meets all of the exclusion requirements; or

(2) Debris as defined in Rule R315-268 that the Director, considering the extent of contamination, has determined is no longer contaminated with hazardous waste.

(g)(1) A hazardous waste that is listed in Sections R315-261-30 through 35 solely because it exhibits one or more characteristics of ignitability as defined under Section R315-261-21, corrosivity as defined under Section R315-261-22, or reactivity as defined under Section R315-261-23 is not a hazardous waste, if the waste no longer exhibits any characteristic of hazardous waste identified in Sections R315-261-20 through 24.

(2) The exclusion described in Subsection R315-261-3(g)(1) also pertains to:

(i) Any mixture of a solid waste and a hazardous waste listed in Sections R315-261-30 through 35 solely because it exhibits the characteristics of ignitability, corrosivity, or reactivity as regulated under Subsection R315-261-3(a)(2)(iv); and

(ii) Any solid waste generated from treating, storing, or disposing of a hazardous waste listed in Sections R315-261-30 through 35 solely because it exhibits the characteristics of ignitability, corrosivity, or reactivity as regulated under Subsection R315-261-3(c)(2)(i).

(3) Wastes excluded under Subsection R315-261-3(g) are subject to Rule R315-268, as applicable, even if they no longer exhibit a characteristic at the point of land disposal.

(4) Any mixture of a solid waste excluded from regulation under Subsection R315-261-4(b)(7) and a hazardous waste listed in Sections R315-261-30 through 35 solely because it exhibits one or more of the characteristics of ignitability, corrosivity, or reactivity as regulated under Subsection R315-261-3(a)(2)(iv) is not a hazardous waste, if the mixture no longer exhibits any characteristic of hazardous waste identified in Sections R315-261-20 through 24 for which the hazardous waste listed in Sections R315-261-30 through 35 was listed.

R315-261-4. Exclusions.

(a) Materials which are not solid wastes. The following materials are not solid wastes for the purpose of Rule R315-261:

(1)(i) Domestic sewage; and

(ii) Any mixture of domestic sewage and other wastes that passes through a sewer system to a publicly-owned treatment works for treatment. "Domestic sewage" means untreated

sanitary wastes that pass through a sewer system.

(2) Industrial wastewater discharges that are point source discharges subject to regulation under section 402 of the Clean Water Act, as amended. This exclusion applies only to the actual point source discharge. It does not exclude industrial wastewaters while they are being collected, stored or treated before discharge, nor does it exclude sludges that are generated by industrial wastewater treatment.

(3) Irrigation return flows.

(4) Source, special nuclear or by-product material as defined by the Atomic Energy Act of 1954, as amended, 42 U.S.C. 2011 et seq.

(5) Materials subjected to in-situ mining techniques which are not removed from the ground as part of the extraction process.

(6) Pulping liquors, i.e., black liquor, that are reclaimed in a pulping liquor recovery furnace and then reused in the pulping process, unless it is accumulated speculatively as defined in Subsection R315-261-1(c).

(7) Spent sulfuric acid used to produce virgin sulfuric acid provided it is not accumulated speculatively as defined in Subsection R315-261-1(c).

(8) Secondary materials that are reclaimed and returned to the original process or processes in which they were generated where they are reused in the production process provided:

(i) Only tank storage is involved, and the entire process through completion of reclamation is closed by being entirely connected with pipes or other comparable enclosed means of conveyance;

(ii) Reclamation does not involve controlled flame combustion, such as occurs in boilers, industrial furnaces, or incinerators;

(iii) The secondary materials are never accumulated in such tanks for over twelve months without being reclaimed; and

(iv) The reclaimed material is not used to produce a fuel, or used to produce products that are used in a manner constituting disposal.

(9)(i) Spent wood preserving solutions that have been reclaimed and are reused for their original intended purpose; and

(ii) Wastewaters from the wood preserving process that have been reclaimed and are reused to treat wood.

(iii) Prior to reuse, the wood preserving wastewaters and spent wood preserving solutions described in Subsections R315-261-4(a)(9)(i) and (ii), so long as they meet all of the following conditions:

(A) The wood preserving wastewaters and spent wood preserving solutions are reused on-site at water borne plants in the production process for their original intended purpose;

(B) Prior to reuse, the wastewaters and spent wood preserving solutions are managed to prevent release to either land or groundwater or both;

(C) Any unit used to manage wastewaters and/or spent wood preserving solutions prior to reuse can be visually or otherwise determined to prevent such releases;

(D) Any drip pad used to manage the wastewaters and/or spent wood preserving solutions prior to reuse complies with the standards in 40 CFR 265.440 through 265.445, which are adopted and incorporated by reference, regardless of whether the plant generates a total of less than 100 kg/month of hazardous waste; and

(E) Prior to operating pursuant to this exclusion, the plant owner or operator prepares a one-time notification stating that the plant intends to claim the exclusion, giving the date on which the plant intends to begin operating under the exclusion, and containing the following language: "I have read the applicable regulation establishing an exclusion for wood preserving wastewaters and spent wood preserving solutions and understand it requires me to comply at all times with the

conditions set out in the regulation." The plant shall maintain a copy of that document in its on-site records until closure of the facility. The exclusion applies so long as the plant meets all of the conditions. If the plant goes out of compliance with any condition, it may apply to the Director for reinstatement. The Director may reinstate the exclusion upon finding that the plant has returned to compliance with all conditions and that the violations are not likely to recur.

(10) EPA Hazardous Waste Nos. K060, K087, K141, K142, K143, K144, K145, K147, and K148, and any wastes from the coke by-products processes that are hazardous only because they exhibit the Toxicity Characteristic specified in Section R315-261-24, subsequent to generation, these materials are recycled to coke ovens, to the tar recovery process as a feedstock to produce coal tar, or mixed with coal tar prior to the tar's sale or refining. This exclusion is conditioned on there being no land disposal of the wastes from the point they are generated to the point they are recycled to coke ovens or tar recovery or refining processes, or mixed with coal tar.

(11) Nonwastewater splash condenser dross residue from the treatment of K061 in high temperature metals recovery units, provided it is shipped in drums, if shipped and not land disposed before recovery.

(12)(i) Oil-bearing hazardous secondary materials, i.e., sludges, byproducts, or spent materials, that are generated at a petroleum refinery, SIC code 2911, and are inserted into the petroleum refining process, SIC code 2911-including, but not limited to, distillation, catalytic cracking, fractionation, or thermal cracking units, i.e., cokers, unless the material is placed on the land, or speculatively accumulated before being so recycled. Materials inserted into thermal cracking units are excluded under Subsection R315-261-4(12)(i), provided that the coke product also does not exhibit a characteristic of hazardous waste. Oil-bearing hazardous secondary materials may be inserted into the same petroleum refinery where they are generated, or sent directly to another petroleum refinery and still be excluded under this provision. Except as provided in Subsection R315-261-4(a)(12)(ii), oil-bearing hazardous secondary materials generated elsewhere in the petroleum industry, i.e., from sources other than petroleum refineries, are not excluded under Section R315-261-4. Residuals generated from processing or recycling materials excluded under Subsection R315-261-4(a)(12)(i), where such materials as generated would have otherwise met a listing under Sections R315-261-30 through R315-261-35, are designated as F037 listed wastes when disposed of or intended for disposal.

(ii) Recovered oil that is recycled in the same manner and with the same conditions as described in Subsection R315-261-4(a)(12)(i). Recovered oil is oil that has been reclaimed from secondary materials, including wastewater, generated from normal petroleum industry practices, including refining, exploration and production, bulk storage, and transportation incident thereto, SIC codes 1311, 1321, 1381, 1382, 1389, 2911, 4612, 4613, 4922, 4923, 4789, 5171, and 5172. Recovered oil does not include oil-bearing hazardous wastes listed in Sections R315-261-30 through 35; however, oil recovered from such wastes may be considered recovered oil. Recovered oil does not include used oil as defined in Subsection 19-6-703(19).

(13) Excluded scrap metal (processed scrap metal, unprocessed home scrap metal, and unprocessed prompt scrap metal) being recycled.

(14) Shredded circuit boards being recycled provided that they are:

(i) Stored in containers sufficient to prevent a release to the environment prior to recovery; and

(ii) Free of mercury switches, mercury relays and nickel-cadmium batteries and lithium batteries.

(15) Condensates derived from the overhead gases from

kraft mill steam strippers that are used to comply with 40 CFR 63.446(e). The exemption applies only to combustion at the mill generating the condensates.

(16) Reserved.

(17) Spent materials, as defined in Section R315-261-1, other than hazardous wastes listed in Sections R315-261-30 through 35, generated within the primary mineral processing industry from which minerals, acids, cyanide, water, or other values are recovered by mineral processing or by beneficiation, provided that:

(i) The spent material is legitimately recycled to recover minerals, acids, cyanide, water or other values;

(ii) The spent material is not accumulated speculatively;

(iii) Except as provided in Subsection R315-261-4(a)(17)(iv), the spent material is stored in tanks, containers, or buildings meeting the following minimum integrity standards: a building shall be an engineered structure with a floor, walls, and a roof all of which are made of non-earthen materials providing structural support, except smelter buildings may have partially earthen floors provided the secondary material is stored on the non-earthen portion, and have a roof suitable for diverting rainwater away from the foundation; a tank shall be free standing, not be a surface impoundment, as defined in Section R315-260-10, and be manufactured of a material suitable for containment of its contents; a container shall be free standing and be manufactured of a material suitable for containment of its contents. If tanks or containers contain any particulate which may be subject to wind dispersal, the owner/operator shall operate these units in a manner which controls fugitive dust. Tanks, containers, and buildings shall be designed, constructed and operated to prevent significant releases to the environment of these materials.

(iv) The Director may make a site-specific determination, after public review and comment, that only solid mineral processing spent material may be placed on pads rather than tanks containers, or buildings. Solid mineral processing spent materials do not contain any free liquid. The Director shall affirm that pads are designed, constructed and operated to prevent significant releases of the secondary material into the environment. Pads shall provide the same degree of containment afforded by the non-RCRA tanks, containers and buildings eligible for exclusion.

(A) The Director shall also consider if storage on pads poses the potential for significant releases via groundwater, surface water, and air exposure pathways. Factors to be considered for assessing the groundwater, surface water, air exposure pathways are: The volume and physical and chemical properties of the secondary material, including its potential for migration off the pad; the potential for human or environmental exposure to hazardous constituents migrating from the pad via each exposure pathway, and the possibility and extent of harm to human and environmental receptors via each exposure pathway.

(B) Pads shall meet the following minimum standards: Be designed of non-earthen material that is compatible with the chemical nature of the mineral processing spent material, capable of withstanding physical stresses associated with placement and removal, have run on/runoff controls, be operated in a manner which controls fugitive dust, and have integrity assurance through inspections and maintenance programs.

(C) Before making a determination under Subsection R315-261-4(a)(17)(iv), the Director shall provide notice and the opportunity for comment to all persons potentially interested in the determination. This can be accomplished by placing notice of this action in major local newspapers, or broadcasting notice over local radio stations.

(v) The owner or operator provides notice to the Director providing the following information: The types of materials to

be recycled; the type and location of the storage units and recycling processes; and the annual quantities expected to be placed in land-based units. This notification shall be updated when there is a change in the type of materials recycled or the location of the recycling process.

(vi) For purposes of Subsection R315-261-4(b)(7), mineral processing spent materials shall be the result of mineral processing and may not include any listed hazardous wastes. Listed hazardous wastes and characteristic hazardous wastes generated by non-mineral processing industries are not eligible for the conditional exclusion from the definition of solid waste.

(18) Petrochemical recovered oil from an associated organic chemical manufacturing facility, where the oil is to be inserted into the petroleum refining process, SIC code 2911, along with normal petroleum refinery process streams, provided:

(i) The oil is hazardous only because it exhibits the characteristic of ignitability, as defined in Section R315-261-21, and/or toxicity for benzene, Section R315-261-24, waste code D018; and

(ii) The oil generated by the organic chemical manufacturing facility is not placed on the land, or speculatively accumulated before being recycled into the petroleum refining process. An "associated organic chemical manufacturing facility" is a facility where the primary SIC code is 2869, but where operations may also include SIC codes 2821, 2822, and 2865; and is physically co-located with a petroleum refinery; and where the petroleum refinery to which the oil being recycled is returned also provides hydrocarbon feedstocks to the organic chemical manufacturing facility. "Petrochemical recovered oil" is oil that has been reclaimed from secondary materials, i.e., sludges, byproducts, or spent materials, including wastewater, from normal organic chemical manufacturing operations, as well as oil recovered from organic chemical manufacturing processes.

(19) Spent caustic solutions from petroleum refining liquid treating processes used as a feedstock to produce cresylic or naphthenic acid unless the material is placed on the land, or accumulated speculatively as defined in Subsection R315-261-1(c).

(20) Hazardous secondary materials used to make zinc fertilizers, provided that the following conditions specified are satisfied:

(i) Hazardous secondary materials used to make zinc micronutrient fertilizers shall not be accumulated speculatively, as defined in Subsection R315-261-1(c)(8).

(ii) Generators and intermediate handlers of zinc-bearing hazardous secondary materials that are to be incorporated into zinc fertilizers shall:

(A) Submit a one-time notice to the Director, which contains the name, address and EPA ID number of the generator or intermediate handler facility, provides a brief description of the secondary material that will be subject to the exclusion, and identifies when the manufacturer intends to begin managing excluded, zinc-bearing hazardous secondary materials under the conditions specified in Subsection R315-261-4(a)(20).

(B) Store the excluded secondary material in tanks, containers, or buildings that are constructed and maintained in a way that prevents releases of the secondary materials into the environment. At a minimum, any building used for this purpose shall be an engineered structure made of non-earth materials that provide structural support, and shall have a floor, walls and a roof that prevent wind dispersal and contact with rainwater. Tanks used for this purpose shall be structurally sound and, if outdoors, shall have roofs or covers that prevent contact with wind and rain. Containers used for this purpose shall be kept closed except when it is necessary to add or remove material, and shall be in sound condition. Containers that are stored outdoors shall be managed within storage areas that:

(I) Have containment structures or systems sufficiently impervious to contain leaks, spills and accumulated

precipitation; and

(II) Provide for effective drainage and removal of leaks, spills and accumulated precipitation; and

(III) Prevent run-on into the containment system.

(C) With each off-site shipment of excluded hazardous secondary materials, provide written notice to the receiving facility that the material is subject to the conditions of Subsection R315-261-4(a)(20).

(D) Maintain at the generator's or intermediate handlers's facility for no less than three years records of all shipments of excluded hazardous secondary materials. For each shipment these records shall at a minimum contain the following information:

(I) Name of the transporter and date of the shipment;

(II) Name and address of the facility that received the excluded material, and documentation confirming receipt of the shipment; and

(III) Type and quantity of excluded secondary material in each shipment.

(iii) Manufacturers of zinc fertilizers or zinc fertilizer ingredients made from excluded hazardous secondary materials shall:

(A) Store excluded hazardous secondary materials in accordance with the storage requirements for generators and intermediate handlers, as specified in Subsection R315-261-4(a)(20)(ii)(B).

(B) Submit a one-time notification to the Director that, at a minimum, specifies the name, address and EPA ID number of the manufacturing facility, and identifies when the manufacturer intends to begin managing excluded, zinc-bearing hazardous secondary materials under the conditions specified in Subsection R315-261-4(a)(20).

(C) Maintain for a minimum of three years records of all shipments of excluded hazardous secondary materials received by the manufacturer, which shall at a minimum identify for each shipment the name and address of the generating facility, name of transporter and date the materials were received, the quantity received, and a brief description of the industrial process that generated the material.

(D) Submit to the Director an annual report that identifies the total quantities of all excluded hazardous secondary materials that were used to manufacture zinc fertilizers or zinc fertilizer ingredients in the previous year, the name and address of each generating facility, and the industrial process(s) from which they were generated.

(iv) Nothing in Section R315-261-4 preempts, overrides or otherwise negates the provision in Section R315-262-11, which requires any person who generates a solid waste to determine if that waste is a hazardous waste.

(v) Interim status and permitted storage units that have been used to store only zinc-bearing hazardous wastes prior to the submission of the one-time notice described in Subsection R315-261-4(a)(20)(ii)(A), and that afterward will be used only to store hazardous secondary materials excluded under Subsection R315-261-4(a)(20), are not subject to the closure requirements of Rules R315-264 and R315-265.

(21) Zinc fertilizers made from hazardous wastes, or hazardous secondary materials that are excluded under Subsection R315-261-4(a)(20), provided that:

(i) The fertilizers meet the following contaminant limits:

(A) For metal contaminants:

TABLE

Constituent	Maximum Allowable Total Concentration in Fertilizer, per Unit (1%) of Zinc ppm)
Arsenic	0.3
Cadmium	1.4
Chromium	0.6
Lead	2.8
Mercury	0.3

(B) For dioxin contaminants the fertilizer shall contain no more than eight (8) parts per trillion of dioxin, measured as toxic equivalent.

(ii) The manufacturer performs sampling and analysis of the fertilizer product to determine compliance with the contaminant limits for metals no less than every six months, and for dioxins no less than every twelve months. Testing shall also be performed whenever changes occur to manufacturing processes or ingredients that could significantly affect the amounts of contaminants in the fertilizer product. The manufacturer may use any reliable analytical method to demonstrate that no constituent of concern is present in the product at concentrations above the applicable limits. It is the responsibility of the manufacturer to ensure that the sampling and analysis are unbiased, precise, and representative of the product(s) introduced into commerce.

(iii) The manufacturer maintains for no less than three years records of all sampling and analyses performed for purposes of determining compliance with the requirements of Subsection R315-261-4(a)(21)(ii). Such records shall at a minimum include:

(A) The dates and times product samples were taken, and the dates the samples were analyzed;

(B) The names and qualifications of the person(s) taking the samples;

(C) A description of the methods and equipment used to take the samples;

(D) The name and address of the laboratory facility at which analyses of the samples were performed;

(E) A description of the analytical methods used, including any cleanup and sample preparation methods; and

(F) All laboratory analytical results used to determine compliance with the contaminant limits specified in this Subsection R315-261-4(a)(21).

(22) Used cathode ray tubes (CRTs)

(i) Used, intact CRTs as defined in Section R315-260-10 are not solid wastes within the United States unless they are disposed, or unless they are speculatively accumulated as defined in Subsection R315-261-1(c)(8) by CRT collectors or glass processors.

(ii) Used, intact CRTs as defined in Section R315-260-10 are not solid wastes when exported for recycling provided that they meet the requirements of Section R315-261-40.

(iii) Used, broken CRTs as defined in Section R315-260-10 are not solid wastes provided that they meet the requirements of Section R315-261-39.

(iv) Glass removed from CRTs is not a solid waste provided that it meets the requirements of Section R315-261-39(c).

(23) Hazardous secondary material generated and legitimately reclaimed within the United States or its territories and under the control of the generator, provided that the material complies with Subsections R315-261-4(a)(23)(i) and (ii):

(i)(A) The hazardous secondary material is generated and reclaimed at the generating facility, for purposes of this definition, generating facility means all contiguous property owned, leased, or otherwise controlled by the hazardous secondary material generator; or

(B) The hazardous secondary material is generated and reclaimed at different facilities, if the reclaiming facility is controlled by the generator or if both the generating facility and the reclaiming facility are controlled by a person as defined in Section R315-260-10, and if the generator provides one of the following certifications: "on behalf of (insert generator facility name), I certify that this facility will send the indicated hazardous secondary material to (insert reclaimer facility name), which is controlled by (insert generator facility name) and that (insert name of either facility) has acknowledged full

responsibility for the safe management of the hazardous secondary material," or "on behalf of (insert generator facility name), I certify that this facility will send the indicated hazardous secondary material to (insert reclaimer facility name), that both facilities are under common control, and that (insert name of either facility) has acknowledged full responsibility for the safe management of the hazardous secondary material." For purposes of this paragraph, "control" means the power to direct the policies of the facility, whether by the ownership of stock, voting rights, or otherwise, except that contractors who operate facilities on behalf of a different person as defined in Section R315-260-10 shall not be deemed to "control" such facilities. The generating and receiving facilities shall both maintain at their facilities for no less than three years records of hazardous secondary materials sent or received under this exclusion. In both cases, the records shall contain the name of the transporter, the date of the shipment, and the type and quantity of the hazardous secondary material shipped or received under the exclusion. These requirements may be satisfied by routine business records, e.g., financial records, bills of lading, copies of DOT shipping papers, or electronic confirmations; or

(C) The hazardous secondary material is generated pursuant to a written contract between a tolling contractor and a toll manufacturer and is reclaimed by the tolling contractor, if the tolling contractor certifies the following: "On behalf of (insert tolling contractor name), I certify that (insert tolling contractor name) has a written contract with (insert toll manufacturer name) to manufacture (insert name of product or intermediate) which is made from specified unused materials, and that (insert tolling contractor name) will reclaim the hazardous secondary materials generated during this manufacture. On behalf of (insert tolling contractor name), I also certify that (insert tolling contractor name) retains ownership of, and responsibility for, the hazardous secondary materials that are generated during the course of the manufacture, including any releases of hazardous secondary materials that occur during the manufacturing process". The tolling contractor shall maintain at its facility for no less than three years records of hazardous secondary materials received pursuant to its written contract with the tolling manufacturer, and the tolling manufacturer shall maintain at its facility for no less than three years records of hazardous secondary materials shipped pursuant to its written contract with the tolling contractor. In both cases, the records shall contain the name of the transporter, the date of the shipment, and the type and quantity of the hazardous secondary material shipped or received pursuant to the written contract. These requirements may be satisfied by routine business records, e.g., financial records, bills of lading, copies of DOT shipping papers, or electronic confirmations. For purposes of Subsection R315-261-4(a)(23)(i)(C), tolling contractor means a person who arranges for the production of a product or intermediate made from specified unused materials through a written contract with a toll manufacturer. Toll manufacturer means a person who produces a product or intermediate made from specified unused materials pursuant to a written contract with a tolling contractor.

(ii)(A) The hazardous secondary material is contained as defined in Section R315-260-10. A hazardous secondary material released to the environment is discarded and a solid waste unless it is immediately recovered for the purpose of reclamation. Hazardous secondary material managed in a unit with leaks or other continuing or intermittent unpermitted releases is discarded and a solid waste.

(B) The hazardous secondary material is not speculatively accumulated, as defined in Subsection R315-261-1(c)(8).

(C) Notice is provided as required by Section R315-260-42.

(D) The material is not otherwise subject to material-specific management conditions under Subsection R315-261-

4(a) when reclaimed, and it is not a spent lead-acid battery, see Sections R315-266-80 and R315-273-2.

(E) Persons performing the recycling of hazardous secondary materials under this exclusion shall maintain documentation of their legitimacy determination on-site. Documentation shall be a written description of how the recycling meets all four factors in Subsection R315-260-43(a). Documentation shall be maintained for three years after the recycling operation has ceased.

(F) The emergency preparedness and response requirements found in Sections R315-261-400, 410, 411 and 420 are met.

(24) Hazardous secondary material that is generated and then transferred to a verified reclamation facility for the purpose of reclamation is not a solid waste, provided that:

(i) The material is not speculatively accumulated, as defined in Subsection R315-261-1(c)(8);

(ii) The material is not handled by any person or facility other than the hazardous secondary material generator, the transporter, an intermediate facility or a reclaimer, and, while in transport, is not stored for more than 10 days at a transfer facility, as defined in Section R315-260-10, and is packaged according to applicable Department of Transportation regulations at 49 CFR parts 173, 178, and 179 while in transport;

(iii) The material is not otherwise subject to material-specific management conditions under Subsection R315-261-4(a) when reclaimed, and it is not a spent lead-acid battery, see Sections R315-266-80 and R315-273-2;

(iv) The reclamation of the material is legitimate, as specified under Section R315-260-43;

(v) The hazardous secondary material generator satisfies all of the following conditions:

(A) The material shall be contained as defined in Section R315-260-10. A hazardous secondary material released to the environment is discarded and a solid waste unless it is immediately recovered for the purpose of recycling. Hazardous secondary material managed in a unit with leaks or other continuing releases is discarded and a solid waste.

(B) The hazardous secondary material generator shall arrange for transport of hazardous secondary materials to a verified reclamation facility, or facilities, in the United States. A verified reclamation facility is a facility that has been granted an exclusion under Subsection R315-260-31(d), or a reclamation facility where the management of the hazardous secondary materials is addressed under a hazardous waste Part B permit or interim status standards. If the hazardous secondary material will be passing through an intermediate facility, the intermediate facility shall have been granted an exclusion under Subsection R315-260-31(d) or the management of the hazardous secondary materials at that facility shall be addressed under a hazardous waste Part B permit or interim status standards, and the hazardous secondary material generator shall make contractual arrangements with the intermediate facility to ensure that the hazardous secondary material is sent to the reclamation facility identified by the hazardous secondary material generator.

(C) The hazardous secondary material generator shall maintain at the generating facility for no less than three years records of all off-site shipments of hazardous secondary materials. For each shipment, these records shall, at a minimum, contain the following information:

(I) Name of the transporter and date of the shipment;

(II) Name and address of each reclaimer and, if applicable, the name and address of each intermediate facility to which the hazardous secondary material was sent;

(III) The type and quantity of hazardous secondary material in the shipment.

(D) The hazardous secondary material generator shall

maintain at the generating facility for no less than three years confirmations of receipt from each reclaimer and, if applicable, each intermediate facility for all off-site shipments of hazardous secondary materials. Confirmations of receipt shall include the name and address of the reclaimer, or intermediate facility, the type and quantity of the hazardous secondary materials received and the date which the hazardous secondary materials were received. This requirement may be satisfied by routine business records, e.g., financial records, bills of lading, copies of DOT shipping papers, or electronic confirmations of receipt;

(E) The hazardous secondary material generator shall comply with the emergency preparedness and response conditions in Sections R315-261-400, 410, 411, and 420.

(vi) Reclaimers of hazardous secondary material excluded from regulation under this exclusion and intermediate facilities as defined in Section R315-260-10 satisfy all of the following conditions:

(A) The reclaimer and intermediate facility shall maintain at its facility for no less than three years records of all shipments of hazardous secondary material that were received at the facility and, if applicable, for all shipments of hazardous secondary materials that were received and subsequently sent off-site from the facility for further reclamation. For each shipment, these records shall at a minimum contain the following information:

(I) Name of the transporter and date of the shipment;

(II) Name and address of the hazardous secondary material generator and, if applicable, the name and address of the reclaimer or intermediate facility which the hazardous secondary materials were received from;

(III) The type and quantity of hazardous secondary material in the shipment; and

(IV) For hazardous secondary materials that, after being received by the reclaimer or intermediate facility, were subsequently transferred off-site for further reclamation, the name and address of the, subsequent, reclaimer and, if applicable, the name and address of each intermediate facility to which the hazardous secondary material was sent.

(B) The intermediate facility shall send the hazardous secondary material to the reclaimer(s) designated by the hazardous secondary materials generator.

(C) The reclaimer and intermediate facility shall send to the hazardous secondary material generator confirmations of receipt for all off-site shipments of hazardous secondary materials. Confirmations of receipt shall include the name and address of the reclaimer, or intermediate facility, the type and quantity of the hazardous secondary materials received and the date which the hazardous secondary materials were received. This requirement may be satisfied by routine business records, e.g., financial records, bills of lading, copies of DOT shipping papers, or electronic confirmations of receipt.

(D) The reclaimer and intermediate facility shall manage the hazardous secondary material in a manner that is at least as protective as that employed for analogous raw material and shall be contained. An "analogous raw material" is a raw material for which a hazardous secondary material is a substitute and serves the same function and has similar physical and chemical properties as the hazardous secondary material.

(E) Any residuals that are generated from reclamation processes shall be managed in a manner that is protective of human health and the environment. If any residuals exhibit a hazardous characteristic according to Sections R315-261-20 through 24, or if they themselves are specifically listed in Sections R315-261-30 through 35, such residuals are hazardous wastes and shall be managed in accordance with the applicable requirements of Rules R315-260 through 266, 268, and 270.

(F) The reclaimer and intermediate facility have financial assurance as required under Sections R315-261-140 through 151,

(G) The reclaimer and intermediate facility have been granted an exclusion under Subsection R315-260-31(d) or have a hazardous waste Part B permit or interim status standards that address the management of the hazardous secondary materials; and

(vii) All persons claiming the exclusion under Subsection R315-261-4(a)(24) provide notification as required under Section R315-260-42.

(25) Reserved

(26) Solvent-contaminated wipes that are sent for cleaning and reuse are not solid wastes from the point of generation, provided that

(i) The solvent-contaminated wipes, when accumulated, stored, and transported, are contained in non-leaking, closed containers that are labeled "Excluded Solvent-Contaminated Wipes." The containers shall be able to contain free liquids, should free liquids occur. During accumulation, a container is considered closed when there is complete contact between the fitted lid and the rim, except when it is necessary to add or remove solvent-contaminated wipes. When the container is full, or when the solvent-contaminated wipes are no longer being accumulated, or when the container is being transported, the container shall be sealed with all lids properly and securely affixed to the container and all openings tightly bound or closed sufficiently to prevent leaks and emissions;

(ii) The solvent-contaminated wipes may be accumulated by the generator for up to 180 days from the start date of accumulation for each container prior to being sent for cleaning;

(iii) At the point of being sent for cleaning on-site or at the point of being transported off-site for cleaning, the solvent-contaminated wipes shall contain no free liquids as defined in Section R315-260-10.

(iv) Free liquids removed from the solvent-contaminated wipes or from the container holding the wipes shall be managed according to the applicable regulations found in Rules R315-260 through 266, 268, 270 and 273;

(v) Generators shall maintain at their site the following documentation:

(A) Name and address of the laundry or dry cleaner that is receiving the solvent-contaminated wipes;

(B) Documentation that the 180-day accumulation time limit in Subsection R315-261-4(a)(26)(ii) is being met;

(C) Description of the process the generator is using to ensure the solvent-contaminated wipes contain no free liquids at the point of being laundered or dry cleaned on-site or at the point of being transported off-site for laundering or dry cleaning;

(vi) The solvent-contaminated wipes are sent to a laundry or dry cleaner whose discharge, if any, is regulated under sections 301 and 402 or section 307 of the Clean Water Act.

(27) Hazardous secondary material that is generated and then transferred to another person for the purpose of remanufacturing is not a solid waste, provided that:

(i) The hazardous secondary material consists of one or more of the following spent solvents: Toluene, xylenes, ethylbenzene, 1,2,4-trimethylbenzene, chlorobenzene, n-hexane, cyclohexane, methyl tert-butyl ether, acetonitrile, chloroform, chloromethane, dichloromethane, methyl isobutyl ketone, NN-dimethylformamide, tetrahydrofuran, n-butyl alcohol, ethanol, and/or methanol;

(ii) The hazardous secondary material originated from using one or more of the solvents listed in Subsection R315-261-4(a)(27)(i) in a commercial grade for reacting, extracting, purifying, or blending chemicals, or for rinsing out the process lines associated with these functions; in the pharmaceutical manufacturing, NAICS 325412; basic organic chemical manufacturing, NAICS 325199; plastics and resins manufacturing, NAICS 325211; and/or the paints and coatings manufacturing sectors, NAICS 325510.

(iii) The hazardous secondary material generator sends the hazardous secondary material spent solvents listed in Subsection R315-261-4(a)(27)(i) to a remanufacturer in the pharmaceutical manufacturing, NAICS 325412; basic organic chemical manufacturing, NAICS 325199; plastics and resins manufacturing, NAICS 325211; and/or the paints and coatings manufacturing sectors, NAICS 325510.

(iv) After remanufacturing one or more of the solvents listed in Subsection R315-261-4(a)(27)(i), the use of the remanufactured solvent shall be limited to reacting, extracting, purifying, or blending chemicals, or for rinsing out the process lines associated with these functions, in the pharmaceutical manufacturing, NAICS 325412; basic organic chemical manufacturing, NAICS 325199; plastics and resins manufacturing, NAICS 325211; and the paints and coatings manufacturing sectors, NAICS 325510; or to using them as ingredients in a product. These allowed uses correspond to chemical functional uses enumerated under the Chemical Data Reporting Rule of the Toxic Substances Control Act, 40 CFR parts 704, 710-711, including Industrial Function Codes U015, solvents consumed in a reaction to produce other chemicals, and U030, solvents become part of the mixture;

(v) After remanufacturing one or more of the solvents listed in Subsection R315-261-4(a)(27)(i), the use of the remanufactured solvent does not involve cleaning or degreasing oil, grease, or similar material from textiles, glassware, metal surfaces, or other articles. (These disallowed continuing uses correspond to chemical functional uses in Industrial Function Code U029 under the Chemical Data Reporting Rule of the Toxic Substances Control Act.); and

(vi) Both the hazardous secondary material generator and the remanufacturer shall:

(A) Notify the Director and update the notification every two years per Section R315-260-42;

(B) Develop and maintain an up-to-date remanufacturing plan which identifies:

(I) The name, address and EPA ID number of the generator(s) and the remanufacturer(s),

(II) The types and estimated annual volumes of spent solvents to be remanufactured,

(III) The processes and industry sectors that generate the spent solvents,

(IV) The specific uses and industry sectors for the remanufactured solvents, and

(V) A certification from the remanufacturer stating "on behalf of (insert remanufacturer facility name), I certify that this facility is a remanufacturer under pharmaceutical manufacturing, NAICS 325412; basic organic chemical manufacturing, NAICS 325199; plastics and resins manufacturing, NAICS 325211; and/or the paints and coatings manufacturing sectors, NAICS 325510; and will accept the spent solvent(s) for the sole purpose of remanufacturing into commercial-grade solvent(s) that will be used for reacting, extracting, purifying, or blending chemicals, or for rinsing out the process lines associated with these functions, or for use as product ingredient(s). I also certify that the remanufacturing equipment, vents, and tanks are equipped with and are operating air emission controls in compliance with the appropriate Clean Air Act regulations under 40 CFR part 60, part 61 or part 63, or, absent such Clean Air Act standards for the particular operation or piece of equipment covered by the remanufacturing exclusion, are in compliance with the appropriate standards in Sections R315-261-1030 through 1035, 1050 through 1064 and 1080 through 1089";

(C) Maintain records of shipments and confirmations of receipts for a period of three years from the dates of the shipments;

(D) Prior to remanufacturing, store the hazardous spent solvents in tanks or containers that meet technical standards

found in Sections R315-261-17- through 179 and 190 through 200, with the tanks and containers being labeled or otherwise having an immediately available record of the material being stored;

(E) During remanufacturing, and during storage of the hazardous secondary materials prior to remanufacturing, the remanufacturer certifies that the remanufacturing equipment, vents, and tanks are equipped with and are operating air emission controls in compliance with the appropriate Clean Air Act regulations under 40 CFR part 60, part 61 or part 63; or, absent such Clean Air Act standards for the particular operation or piece of equipment covered by the remanufacturing exclusion, are in compliance with the appropriate standards in Sections R315-261-1030 through 1035, 1050 through 1064 and 1080 through 1089; and

(F) Meet the requirements prohibiting speculative accumulation per Subsection R315-261-1(c)(8).

(b) Solid wastes which are not hazardous wastes. The following solid wastes are not hazardous wastes:

(1) Household waste, including household waste that has been collected, transported, stored, treated, disposed, recovered, e.g., refuse-derived fuel, or reused. "Household waste" means any material, including garbage, trash and sanitary wastes in septic tanks, derived from households, including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds and day-use recreation areas. A resource recovery facility managing municipal solid waste shall not be deemed to be treating, storing, disposing of, or otherwise managing hazardous wastes for the purposes of regulation under this subtitle, if such facility:

(i) Receives and burns only

(A) Household waste, from single and multiple dwellings, hotels, motels, and other residential sources, and

(B) Solid waste from commercial or industrial sources that does not contain hazardous waste; and

(ii) Such facility does not accept hazardous wastes and the owner or operator of such facility has established contractual requirements or other appropriate notification or inspection procedures to assure that hazardous wastes are not received at or burned in such facility.

(2) Solid wastes generated by any of the following and which are returned to the soils as fertilizers:

(i) The growing and harvesting of agricultural crops.

(ii) The raising of animals, including animal manures.

(3) Mining overburden returned to the mine site.

(4)(i) Fly ash waste, bottom ash waste, slag waste, and flue gas emission control waste generated primarily from the combustion of coal or other fossil fuels, except as provided by Section R315-266-112 for facilities that burn or process hazardous waste.

(ii) The following wastes generated primarily from processes that support the combustion of coal or other fossil fuels that are co-disposed with the wastes in Subsection R315-261-4(b)(4)(i), except as provided by Section R315-266-112 for facilities that burn or process hazardous waste:

(A) Coal pile run-off. For purposes of Subsection R315-261-4(b)(4), coal pile run-off means any precipitation that drains off coal piles.

(B) Boiler cleaning solutions. For purposes of Subsection R315-261-4(b)(4), boiler cleaning solutions means water solutions and chemical solutions used to clean the fire-side and water-side of the boiler.

(C) Boiler blowdown. For purposes of Subsection R315-261-4(b)(4), boiler blowdown means water purged from boilers used to generate steam.

(D) Process water treatment and demineralizer regeneration wastes. For purposes of Subsection R315-261-4(b)(4), process water treatment and demineralizer regeneration wastes means sludges, rinses, and spent resins generated from

processes to remove dissolved gases, suspended solids, and dissolved chemical salts from combustion system process water.

(E) Cooling tower blowdown. For purposes of Subsection R315-261-4(b)(4), cooling tower blowdown means water purged from a closed cycle cooling system. Closed cycle cooling systems include cooling towers, cooling ponds, or spray canals.

(F) Air heater and precipitator washes. For purposes of Subsection R315-261-4(b)(4), air heater and precipitator washes means wastes from cleaning air preheaters and electrostatic precipitators.

(G) Effluents from floor and yard drains and sumps. For purposes of Subsection R315-261-4(b)(4), effluents from floor and yard drains and sumps means wastewaters, such as wash water, collected by or from floor drains, equipment drains, and sumps located inside the power plant building; and wastewaters, such as rain runoff, collected by yard drains and sumps located outside the power plant building.

(H) Wastewater treatment sludges. For purposes of Subsection R315-261-4(b)(4), wastewater treatment sludges refers to sludges generated from the treatment of wastewaters specified in Subsections R315-261-4(b)(4)(ii)(A) through (F).

(5) Drilling fluids, produced waters, and other wastes associated with the exploration, development, or production of crude oil, natural gas or geothermal energy.

(6)(i) Wastes which fail the test for the Toxicity Characteristic because chromium is present or are listed in Sections R315-261-30 through R316-261-35 due to the presence of chromium, which do not fail the test for the Toxicity Characteristic for any other constituent or are not listed due to the presence of any other constituent, and which do not fail the test for any other characteristic, if it is shown by a waste generator or by waste generators that:

(A) The chromium in the waste is exclusively, or nearly exclusively, trivalent chromium; and

(B) The waste is generated from an industrial process which uses trivalent chromium exclusively (or nearly exclusively) and the process does not generate hexavalent chromium; and

(C) The waste is typically and frequently managed in non-oxidizing environments.

(ii) Specific wastes which meet the standard in Subsections R315-261-4(b)(6)(i)(A), (B), and (C), so long as they do not fail the test for the toxicity characteristic for any other constituent, and do not exhibit any other characteristic, are:

(A) Chrome (blue) trimmings generated by the following subcategories of the leather tanning and finishing industry; hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearing.

(B) Chrome (blue) shavings generated by the following subcategories of the leather tanning and finishing industry: Hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearing.

(C) Buffing dust generated by the following subcategories of the leather tanning and finishing industry; hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue.

(D) Sewer screenings generated by the following subcategories of the leather tanning and finishing industry: Hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearing.

(E) Wastewater treatment sludges generated by the following subcategories of the leather tanning and finishing industry: Hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no

beamhouse; through-the-blue; and shearling.

(F) Wastewater treatment sludges generated by the following subcategories of the leather tanning and finishing industry: Hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; and through-the-blue.

(G) Waste scrap leather from the leather tanning industry, the shoe manufacturing industry, and other leather product manufacturing industries.

(H) Wastewater treatment sludges from the production of TiO₂ pigment using chromium-bearing ores by the chloride process.

(7) Solid waste from the extraction, beneficiation, and processing of ores and minerals, including coal, phosphate rock, and overburden from the mining of uranium ore, except as provided by Section R315-266-112 for facilities that burn or process hazardous waste.

(i) For purposes of Subsection R315-261-4(b)(7) beneficiation of ores and minerals is restricted to the following activities; crushing; grinding; washing; dissolution; crystallization; filtration; sorting; sizing; drying; sintering; pelletizing; briquetting; calcining to remove water and/or carbon dioxide; roasting, autoclaving, and/or chlorination in preparation for leaching (except where the roasting (and/or autoclaving and/or chlorination)/leaching sequence produces a final or intermediate product that does not undergo further beneficiation or processing); gravity concentration; magnetic separation; electrostatic separation; flotation; ion exchange; solvent extraction; electrowinning; precipitation; amalgamation; and heap, dump, vat, tank, and in situ leaching.

(ii) For the purposes of Subsection R315-261-4(b)(7), solid waste from the processing of ores and minerals includes only the following wastes as generated:

- (A) Slag from primary copper processing;
- (B) Slag from primary lead processing;
- (C) Red and brown muds from bauxite refining;
- (D) Phosphogypsum from phosphoric acid production;
- (E) Slag from elemental phosphorus production;
- (F) Gasifier ash from coal gasification;
- (G) Process wastewater from coal gasification;
- (H) Calcium sulfate wastewater treatment plant sludge from primary copper processing;
- (I) Slag tailings from primary copper processing;
- (J) Fluorogypsum from hydrofluoric acid production;
- (K) Process wastewater from hydrofluoric acid production;
- (L) Air pollution control dust/sludge from iron blast furnaces;
- (M) Iron blast furnace slag;
- (N) Treated residue from roasting/leaching of chrome ore;
- (O) Process wastewater from primary magnesium processing by the anhydrous process;
- (P) Process wastewater from phosphoric acid production;
- (Q) Basic oxygen furnace and open hearth furnace air pollution control dust/sludge from carbon steel production;
- (R) Basic oxygen furnace and open hearth furnace slag from carbon steel production;
- (S) Chloride process waste solids from titanium tetrachloride production;
- (T) Slag from primary zinc processing.

(iii) A residue derived from co-processing mineral processing secondary materials with normal beneficiation raw materials or with normal mineral processing raw materials remains excluded under Subsection R315-261-4(b) if the owner or operator:

(A) Processes at least 50 percent by weight normal beneficiation raw materials or normal mineral processing raw materials; and,

(B) Legitimately reclaims the secondary mineral processing materials.

(8) Cement kiln dust waste, except as provided by Section

R315-266-112 for facilities that burn or process hazardous waste.

(9) Solid waste which consists of discarded arsenical-treated wood or wood products which fails the test for the Toxicity Characteristic for Hazardous Waste Codes D004 through D017 and which is not a hazardous waste for any other reason if the waste is generated by persons who utilize the arsenical-treated wood and wood products for these materials' intended end use.

(10) Petroleum-contaminated media and debris that fail the test for the Toxicity Characteristic of Section R315-261-24, Hazardous Waste Codes D018 through D043 only, and are subject to the corrective action regulations under Section R315-311-202-1 which adopts 40 CFR 280 by reference.

(11) Injected groundwater that is hazardous only because it exhibits the Toxicity Characteristic, Hazardous Waste Codes D018 through D043 only, in Section R315-261-24 that is reinjected through an underground injection well pursuant to free phase hydrocarbon recovery operations undertaken at petroleum refineries, petroleum marketing terminals, petroleum bulk plants, petroleum pipelines, and petroleum transportation spill sites until January 25, 1993. This extension applies to recovery operations in existence, or for which contracts have been issued, on or before March 25, 1991. For groundwater returned through infiltration galleries from such operations at petroleum refineries, marketing terminals, and bulk plants, until October 2, 1991. New operations involving injection wells, beginning after March 25, 1991, will qualify for this compliance date extension, until January 25, 1993, only if:

(i) Operations are performed pursuant to a written state agreement that includes a provision to assess the groundwater and the need for further remediation once the free phase recovery is completed; and

(ii) A copy of the written agreement has been submitted to: Waste Identification Branch (5304), U.S. Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460 and the Division of Waste Management and Radiation Control, PO Box 144880, Salt Lake City, UT 84114-4880.

(12) Used chlorofluorocarbon refrigerants from totally enclosed heat transfer equipment, including mobile air conditioning systems, mobile refrigeration, and commercial and industrial air conditioning and refrigeration systems that use chlorofluorocarbons as the heat transfer fluid in a refrigeration cycle, provided the refrigerant is reclaimed for further use.

(13) Non-terme plated used oil filters that are not mixed with wastes listed in Sections R315-261-30 through R315-261-35 if these oil filters have been gravity hot-drained using one of the following methods:

(i) Puncturing the filter anti-drain back valve or the filter dome end and hot-draining;

(ii) Hot-draining and crushing;

(iii) Dismantling and hot-draining; or

(iv) Any other equivalent hot-draining method that will remove used oil.

(14) Used oil re-refining distillation bottoms that are used as feedstock to manufacture asphalt products.

(15) Leachate or gas condensate collected from landfills where certain solid wastes have been disposed, provided that:

(i) The solid wastes disposed would meet one or more of the listing descriptions for Hazardous Waste Codes K169, K170, K171, K172, K174, K175, K176, K177, K178 and K181 if these wastes had been generated after the effective date of the listing;

(ii) The solid wastes described in Subsection R315-261-4(b)(15)(i) were disposed prior to the effective date of the listing;

(iii) The leachate or gas condensate do not exhibit any characteristic of hazardous waste nor are derived from any other

listed hazardous waste;

(iv) Discharge of the leachate or gas condensate, including leachate or gas condensate transferred from the landfill to a POTW by truck, rail, or dedicated pipe, is subject to regulation under sections 307(b) or 402 of the Clean Water Act.

(v) As of February 13, 2001, leachate or gas condensate derived from K169-K172 is no longer exempt if it is stored or managed in a surface impoundment prior to discharge. As of November 21, 2003, leachate or gas condensate derived from K176, K177, and K178 is no longer exempt if it is stored or managed in a surface impoundment prior to discharge. After February 26, 2007, leachate or gas condensate derived from K181 will no longer be exempt if it is stored or managed in a surface impoundment prior to discharge. There is one exception: if the surface impoundment is used to temporarily store leachate or gas condensate in response to an emergency situation, e.g., shutdown of wastewater treatment system, provided the impoundment has a double liner, and provided the leachate or gas condensate is removed from the impoundment and continues to be managed in compliance with the conditions of Subsection R315-261-4(b)(15)(v) after the emergency ends.

(16) Reserved

(17) Reserved

(18) Solvent-contaminated wipes, except for wipes that are hazardous waste due to the presence of trichloroethylene, that are sent for disposal are not hazardous wastes from the point of generation provided that

(i) The solvent-contaminated wipes, when accumulated, stored, and transported, are contained in non-leaking, closed containers that are labeled "Excluded Solvent-Contaminated Wipes." The containers shall be able to contain free liquids, should free liquids occur. During accumulation, a container is considered closed when there is complete contact between the fitted lid and the rim, except when it is necessary to add or remove solvent-contaminated wipes. When the container is full, or when the solvent-contaminated wipes are no longer being accumulated, or when the container is being transported, the container shall be sealed with all lids properly and securely affixed to the container and all openings tightly bound or closed sufficiently to prevent leaks and emissions;

(ii) The solvent-contaminated wipes may be accumulated by the generator for up to 180 days from the start date of accumulation for each container prior to being sent for disposal;

(iii) At the point of being transported for disposal, the solvent-contaminated wipes shall contain no free liquids as defined in Section R315-260-10.

(iv) Free liquids removed from the solvent-contaminated wipes or from the container holding the wipes shall be managed according to the applicable regulations found in Rules R315-260 through 266, 268, 270 and 273;

(v) Generators shall maintain at their site the following documentation:

(A) Name and address of the landfill or combustor that is receiving the solvent-contaminated wipes;

(B) Documentation that the 180 day accumulation time limit in Subsection R315-261-4(b)(18)(ii) is being met;

(C) Description of the process the generator is using to ensure solvent-contaminated wipes contain no free liquids at the point of being transported for disposal;

(vi) The solvent-contaminated wipes are sent for disposal

(A) To a solid waste landfill that:

(1) is regulated under R315-301 through R315-320

(2) is a Class I or V Landfill; and

(3) has a composite liner; or

(B) To a hazardous waste landfill regulated under Rules R315-260 through 266, 268, and 270; or

(C) To a municipal waste combustor or other combustion facility regulated under section 129 of the Clean Air Act or to a hazardous waste combustor, boiler, or industrial furnace

regulated under Rule R315-264, Rule R315-265, or Sections R315-266-100 through R315-266-112.

(c) Hazardous wastes which are exempted from certain regulations. A hazardous waste which is generated in a product or raw material storage tank, a product or raw material transport vehicle or vessel, a product or raw material pipeline, or in a manufacturing process unit or an associated non-waste-treatment-manufacturing unit, is not subject to regulation under Rules R315-262 through 265, 268, 270, and 124 or to the notification requirements of section 3010 of RCRA until it exits the unit in which it was generated, unless the unit is a surface impoundment, or unless the hazardous waste remains in the unit more than 90 days after the unit ceases to be operated for manufacturing, or for storage or transportation of product or raw materials.

(d)(1) Samples. Except as provided in Subsection R315-261-4(d)(2), a sample of solid waste or a sample of water, soil, or air, which is collected for the sole purpose of testing to determine its characteristics or composition, is not subject to any requirements of Rules R315-261 through 266, 268 or 270 or 124 or to the notification requirements of Section 3010 of RCRA, when:

(i) The sample is being transported to a laboratory for the purpose of testing; or

(ii) The sample is being transported back to the sample collector after testing; or

(iii) The sample is being stored by the sample collector before transport to a laboratory for testing; or

(iv) The sample is being stored in a laboratory before testing; or

(v) The sample is being stored in a laboratory after testing but before it is returned to the sample collector; or

(vi) The sample is being stored temporarily in the laboratory after testing for a specific purpose (for example, until conclusion of a court case or enforcement action where further testing of the sample may be necessary).

(2) In order to qualify for the exemption in Subsections R315-261-4(d)(1) (i) and (ii), a sample collector shipping samples to a laboratory and a laboratory returning samples to a sample collector shall:

(i) Comply with U.S. Department of Transportation (DOT), U.S. Postal Service (USPS), or any other applicable shipping requirements; or

(ii) Comply with the following requirements if the sample collector determines that DOT, USPS, or other shipping requirements do not apply to the shipment of the sample:

(A) Assure that the following information accompanies the sample:

(I) The sample collector's name, mailing address, and telephone number;

(II) The laboratory's name, mailing address, and telephone number;

(III) The quantity of the sample;

(IV) The date of shipment; and

(V) A description of the sample.

(B) Package the sample so that it does not leak, spill, or vaporize from its packaging.

(3) This exemption does not apply if the laboratory determines that the waste is hazardous but the laboratory is no longer meeting any of the conditions stated in Subsection R315-261-4(d)(1).

(e)(1) Treatability Study Samples. Except as provided in Subsection R315-261-4(e)(2), persons who generate or collect samples for the purpose of conducting treatability studies as defined in Section R315-260-10, are not subject to any requirement of Rules R315-261 through 263 or to the notification requirements of Section 3010 of RCRA, nor are such samples included in the quantity determinations of Section R315-261-5 and Subsection R315-262-34(d) when:

(i) The sample is being collected and prepared for transportation by the generator or sample collector; or

(ii) The sample is being accumulated or stored by the generator or sample collector prior to transportation to a laboratory or testing facility; or

(iii) The sample is being transported to the laboratory or testing facility for the purpose of conducting a treatability study.

(2) The exemption in Subsection R315-261-4(e)(1) is applicable to samples of hazardous waste being collected and shipped for the purpose of conducting treatability studies provided that:

(i) The generator or sample collector uses (in "treatability studies") no more than 10,000 kg of media contaminated with non-acute hazardous waste, 1000 kg of non-acute hazardous waste other than contaminated media, 1 kg of acute hazardous waste, 2500 kg of media contaminated with acute hazardous waste for each process being evaluated for each generated waste stream; and

(ii) The mass of each sample shipment does not exceed 10,000 kg; the 10,000 kg quantity may be all media contaminated with non-acute hazardous waste, or may include 2500 kg of media contaminated with acute hazardous waste, 1000 kg of hazardous waste, and 1 kg of acute hazardous waste; and

(iii) The sample shall be packaged so that it will not leak, spill, or vaporize from its packaging during shipment and the requirements of Subsections R315-261-4(e)(2)(iii)(A) or (B) are met.

(A) The transportation of each sample shipment complies with U.S. Department of Transportation (DOT), U.S. Postal Service (USPS), or any other applicable shipping requirements; or

(B) If the DOT, USPS, or other shipping requirements do not apply to the shipment of the sample, the following information shall accompany the sample:

(I) The name, mailing address, and telephone number of the originator of the sample;

(II) The name, address, and telephone number of the facility that will perform the treatability study;

(III) The quantity of the sample;

(IV) The date of shipment; and

(V) A description of the sample, including its EPA Hazardous Waste Number.

(iv) The sample is shipped to a laboratory or testing facility which is exempt under Subsection R315-261-4(f) or has an appropriate RCRA permit or interim status.

(v) The generator or sample collector maintains the following records for a period ending three years after completion of the treatability study:

(A) Copies of the shipping documents;

(B) A copy of the contract with the facility conducting the treatability study;

(C) Documentation showing:

(I) The amount of waste shipped under this exemption;

(II) The name, address, and EPA identification number of the laboratory or testing facility that received the waste;

(III) The date the shipment was made; and

(IV) Whether or not unused samples and residues were returned to the generator.

(vi) The generator reports the information required under Subsection R315-261-4(e)(2)(v)(C) in its biennial report.

(3) The Director may grant requests on a case-by-case basis for up to an additional two years for treatability studies involving bioremediation. The Director may grant requests on a case-by-case basis for quantity limits in excess of those specified in Subsections R315-261-4(e)(2)(i) and (ii) and Subsection R315-261-4(f)(4), for up to an additional 5000 kg of media contaminated with non-acute hazardous waste, 500 kg of non-acute hazardous waste, 2500 kg of media contaminated with

acute hazardous waste and 1 kg of acute hazardous waste:

(i) In response to requests for authorization to ship, store and conduct treatability studies on additional quantities in advance of commencing treatability studies. Factors to be considered in reviewing such requests include the nature of the technology; the type of process, e.g., batch versus continuous; size of the unit undergoing testing, particularly in relation to scale-up considerations; the time/quantity of material required to reach steady state operating conditions; or test design considerations such as mass balance calculations.

(ii) In response to requests for authorization to ship, store and conduct treatability studies on additional quantities after initiation or completion of initial treatability studies, when: There has been an equipment or mechanical failure during the conduct of a treatability study; there is a need to verify the results of a previously conducted treatability study; there is a need to study and analyze alternative techniques within a previously evaluated treatment process; or there is a need to do further evaluation of an ongoing treatability study to determine final specifications for treatment.

(iii) The additional quantities and timeframes allowed in Subsections R315-261-4(e)(3)(i) and (ii) are subject to all the provisions in Subsections R315-261-4(e)(1) and (e)(2)(iii) through (vi). The generator or sample collector shall apply to the Director and provide in writing the following information:

(A) The reason why the generator or sample collector requires additional time or quantity of sample for treatability study evaluation and the additional time or quantity needed;

(B) Documentation accounting for all samples of hazardous waste from the waste stream which have been sent for or undergone treatability studies including the date each previous sample from the waste stream was shipped, the quantity of each previous shipment, the laboratory or testing facility to which it was shipped, what treatability study processes were conducted on each sample shipped, and the available results on each treatability study;

(C) A description of the technical modifications or change in specifications which will be evaluated and the expected results;

(D) If such further study is being required due to equipment or mechanical failure, the applicant shall include information regarding the reason for the failure or breakdown and also include what procedures or equipment improvements have been made to protect against further breakdowns; and

(E) Such other information that the Director considers necessary.

(f) Samples Undergoing Treatability Studies at Laboratories and Testing Facilities. Samples undergoing treatability studies and the laboratory or testing facility conducting such treatability studies, to the extent such facilities are not otherwise subject to RCRA requirements, are not subject to any requirement of Rules R315-261 through 266, 268 and 270, or to the notification requirements of Section 3010 of RCRA provided that the conditions of Subsection R315-261-4(f)(1) through (11) are met. A mobile treatment unit (MTU) may qualify as a testing facility subject to Subsections R315-261-4(f)(1) through (11). Where a group of MTUs are located at the same site, the limitations specified in Subsections R315-261-4(f)(1) through (11) apply to the entire group of MTUs collectively as if the group were one MTU.

(1) No less than 45 days before conducting treatability studies, the facility notifies the Director, in writing that it intends to conduct treatability studies under Subsection R315-261-4(f).

(2) The laboratory or testing facility conducting the treatability study has an EPA identification number.

(3) No more than a total of 10,000 kg of "as received" media contaminated with non-acute hazardous waste, 2500 kg of media contaminated with acute hazardous waste or 250 kg of

other "as received" hazardous waste is subject to initiation of treatment in all treatability studies in any single day. "As received" waste refers to the waste as received in the shipment from the generator or sample collector.

(4) The quantity of "as received" hazardous waste stored at the facility for the purpose of evaluation in treatability studies does not exceed 10,000 kg, the total of which can include 10,000 kg of media contaminated with non-acute hazardous waste, 2500 kg of media contaminated with acute hazardous waste, 1000 kg of non-acute hazardous wastes other than contaminated media, and 1 kg of acute hazardous waste. This quantity limitation does not include treatment materials, including nonhazardous solid waste, added to "as received" hazardous waste.

(5) No more than 90 days have elapsed since the treatability study for the sample was completed, or no more than one year, two years for treatability studies involving bioremediation, have elapsed since the generator or sample collector shipped the sample to the laboratory or testing facility, whichever date first occurs. Up to 500 kg of treated material from a particular waste stream from treatability studies may be archived for future evaluation up to five years from the date of initial receipt. Quantities of materials archived are counted against the total storage limit for the facility.

(6) The treatability study does not involve the placement of hazardous waste on the land or open burning of hazardous waste.

(7) The facility maintains records for three years following completion of each study that show compliance with the treatment rate limits and the storage time and quantity limits. The following specific information shall be included for each treatability study conducted:

- (i) The name, address, and EPA identification number of the generator or sample collector of each waste sample;
- (ii) The date the shipment was received;
- (iii) The quantity of waste accepted;
- (iv) The quantity of "as received" waste in storage each day;
- (v) The date the treatment study was initiated and the amount of "as received" waste introduced to treatment each day;
- (vi) The date the treatability study was concluded;
- (vii) The date any unused sample or residues generated from the treatability study were returned to the generator or sample collector or, if sent to a designated facility, the name of the facility and the EPA identification number.

(8) The facility keeps, on-site, a copy of the treatability study contract and all shipping papers associated with the transport of treatability study samples to and from the facility for a period ending three years from the completion date of each treatability study.

(9) The facility prepares and submits a report to the Director, by March 15 of each year, that includes the following information for the previous calendar year:

- (i) The name, address, and EPA identification number of the facility conducting the treatability studies;
- (ii) The types (by process) of treatability studies conducted;
- (iii) The names and addresses of persons for whom studies have been conducted, including their EPA identification numbers;
- (iv) The total quantity of waste in storage each day;
- (v) The quantity and types of waste subjected to treatability studies;
- (vi) When each treatability study was conducted;
- (vii) The final disposition of residues and unused sample from each treatability study.

(10) The facility determines whether any unused sample or residues generated by the treatability study are hazardous waste under Section R315-261-3 and, if so, are subject to Rules R315-

261 through 268 and 270, unless the residues and unused samples are returned to the sample originator under the Subsection R3315-261-4(e) exemption.

(11) The facility notifies the Director, by letter when the facility is no longer planning to conduct any treatability studies at the site.

(g) Dredged material that is not a hazardous waste. Dredged material that is subject to the requirements of a permit that has been issued under 404 of the Federal Water Pollution Control Act (33 U.S.C. 1344) or section 103 of the Marine Protection, Research, and Sanctuaries Act of 1972 (33 U.S.C. 1413) is not a hazardous waste. For Subsection R315-261-4(g), the following definitions apply:

(1) The term dredged material has the same meaning as defined in 40 CFR 232.2;

(2) The term permit means:

(i) A permit issued by the U.S. Army Corps of Engineers (Corps) or an approved State under section 404 of the Federal Water Pollution Control Act (33 U.S.C. 1344);

(ii) A permit issued by the Corps under section 103 of the Marine Protection, Research, and Sanctuaries Act of 1972 (33 U.S.C. 1413); or

(iii) In the case of Corps civil works projects, the administrative equivalent of the permits referred to in Subsections R315-261-4(g)(2)(i) and (ii), as provided for in Corps regulations.

(h) Carbon dioxide stream injected for geologic sequestration. Carbon dioxide streams that are captured and transported for purposes of injection into an underground injection well subject to the requirements for Class VI Underground Injection Control wells, including the requirements in Rule R317-7, are not a hazardous waste, provided the following conditions are met:

(1) Transportation of the carbon dioxide stream shall be in compliance with U.S. Department of Transportation requirements, including the pipeline safety laws, 49 U.S.C. 60101 et seq. and regulations, 49 CFR Parts 190-199, of the U.S. Department of Transportation, and pipeline safety regulations adopted and administered by a state authority pursuant to a certification under 49 U.S.C. 60105, as applicable.

(2) Injection of the carbon dioxide stream shall be in compliance with the applicable requirements for Class VI Underground Injection Control wells, including the applicable requirements in Rule R317-7;

(3) No hazardous wastes shall be mixed with, or otherwise co-injected with, the carbon dioxide stream; and

(4)(i) Any generator of a carbon dioxide stream, who claims that a carbon dioxide stream is excluded under Subsection R315-261-4(h), shall have an authorized representative, as defined in Section R315-260-10, sign a certification statement worded as follows: I certify under penalty of law that the carbon dioxide stream that I am claiming to be excluded under Subsection R315-261-4(h) has not been mixed with hazardous wastes, and I have transported the carbon dioxide stream in compliance with, or have contracted with a pipeline operator or transporter to transport the carbon dioxide stream in compliance with, Department of Transportation requirements, including the pipeline safety laws, 49 U.S.C. 60101 et seq., and regulations, 49 CFR Parts 190-199, of the U.S. Department of Transportation, and the pipeline safety regulations adopted and administered by a state authority pursuant to a certification under 49 U.S.C. 60105, as applicable, for injection into a well subject to the requirements for the Class VI Underground Injection Control Program of Rule R317-7.

(ii) Any Class VI Underground Injection Control well owner or operator, who claims that a carbon dioxide stream is excluded under Subsection R315-261-4(h), shall have an authorized representative, as defined in Section R315-260-10, sign a certification statement worded as follows: I certify under

penalty of law that the carbon dioxide stream that I am claiming to be excluded under Subsection R315-261-4(h) has not been mixed with, or otherwise co-injected with, hazardous waste at the Underground Injection Control (UIC) Class VI permitted facility, and that injection of the carbon dioxide stream is in compliance with the applicable requirements for UIC Class VI wells, including the applicable requirements in Rule R317-7.

(iii) The signed certification statement shall be kept on-site for no less than three years, and shall be made available within 72 hours of a written request from the Director. The signed certification statement shall be renewed every year that the exclusion is claimed, by having an authorized representative, as defined in Section R315-260-10, annually prepare and sign a new copy of the certification statement within one year of the date of the previous statement. The signed certification statement shall also be readily accessible on the facility's publicly-available Web site, if such Web site exists, as a public notification with the title of "Carbon Dioxide Stream Certification" at the time the exclusion is claimed.

R315-261-6. Requirements for Recyclable Materials.

(a)(1) Hazardous wastes that are recycled are subject to the requirements for generators, transporters, and storage facilities of Subsections R315-261-6(b) and (c), except for the materials listed in Subsections R315-261-6(a)(2) and (a)(3). Hazardous wastes that are recycled shall be known as "recyclable materials."

(2) The following recyclable materials are not subject to the requirements of Section R315-261-6 but are regulated under Sections R315-266-20 through 23, Section R315-266-70, Section R315-266-80, Sections R315-266-100 through 112, Sections R315-266-200 through 206, and Sections R315-266-210, 220, 225, 230, 235, 240, 245, 250, 255, 260, 310, 315, 320, 325, 330, 335, 340, 345, 350, 355, and 360 and all applicable provisions in Rules R315-268, 270 and 124.

(i) Recyclable materials used in a manner constituting disposal, Sections R315-266-20 through 23;

(ii) Hazardous wastes burned, as defined in Subsection R315-266-100(a), in boilers and industrial furnaces that are not regulated under Sections R315-264-340 through 345, 347 and 351; Sections R315-370, 373, 375, 377, and 381 through 383; and Section R315-266-100 through 112;

(iii) Recyclable materials from which precious metals are reclaimed, Section R315-266-70;

(iv) Spent lead-acid batteries that are being reclaimed, Section R315-266-80.

(3) The following recyclable materials are not subject to regulation under Rules R315-262 through 268, 270 and 124, and are not subject to the notification requirements of section 3010 of RCRA:

(i) Industrial ethyl alcohol that is reclaimed except that, unless provided otherwise in an international agreement as specified in Section R315-262-58:

(A) A person initiating a shipment for reclamation in a foreign country, and any intermediary arranging for the shipment, shall comply with the requirements applicable to a primary exporter in Section R315-262-53, Subsections R315-262-56(a)(1) through (4), (6), and (b), and Section R315-262-57, export such materials only upon consent of the receiving country and in conformance with the EPA Acknowledgment of Consent as defined in Sections R315-262-50 through 58, and provide a copy of the EPA Acknowledgment of Consent to the shipment to the transporter transporting the shipment for export;

(B) Transporters transporting a shipment for export may not accept a shipment if he knows the shipment does not conform to the EPA Acknowledgment of Consent, shall ensure that a copy of the EPA Acknowledgment of Consent accompanies the shipment and shall ensure that it is delivered to the facility designated by the person initiating the shipment.

(ii) Scrap metal that is not excluded under Subsection R315-261-4(a)(13);

(iii) Fuels produced from the refining of oil-bearing hazardous waste along with normal process streams at a petroleum refining facility if such wastes result from normal petroleum refining, production, and transportation practices, this exemption does not apply to fuels produced from oil recovered from oil-bearing hazardous waste, where such recovered oil is already excluded under Subsection R315-261-4(a)(12);

(iv)(A) Hazardous waste fuel produced from oil-bearing hazardous wastes from petroleum refining, production, or transportation practices, or produced from oil reclaimed from such hazardous wastes, where such hazardous wastes are reintroduced into a process that does not use distillation or does not produce products from crude oil so long as the resulting fuel meets the used oil specification under Subsection R315-15-1.2(c) and so long as no other hazardous wastes are used to produce the hazardous waste fuel;

(B) Hazardous waste fuel produced from oil-bearing hazardous waste from petroleum refining production, and transportation practices, where such hazardous wastes are reintroduced into a refining process after a point at which contaminants are removed, so long as the fuel meets the used oil fuel specification under Subsection R315-15-1.2(c); and

(C) Oil reclaimed from oil-bearing hazardous wastes from petroleum refining, production, and transportation practices, which reclaimed oil is burned as a fuel without reintroduction to a refining process, so long as the reclaimed oil meets the used oil fuel specification under Subsection R315-15-1.2(c).

(4) Used oil that is recycled and is also a hazardous waste solely because it exhibits a hazardous characteristic is not subject to the requirements of Rules R315-260 through 268, but is regulated under Rule R315-15. Used oil that is recycled includes any used oil which is reused, following its original use, for any purpose, including the purpose for which the oil was originally used. Such term includes, but is not limited to, oil which is re-refined, reclaimed, burned for energy recovery, or reprocessed.

(5) Hazardous waste that is exported to or imported from designated member countries of the Organization for Economic Cooperation and Development (OECD), as defined in Subsection R315-262-58(a)(1), for purpose of recovery is subject to the requirements of Sections R315-262-80 through 87 and 89, if it is subject to either the manifesting requirements of Rule R315-262, to the universal waste management standards of Rule R315-273.

(b) Generators and transporters of recyclable materials are subject to the applicable requirements of Rules R315-262 and 263 and the notification requirements under section 3010 of RCRA, except as provided in Subsection R315-261-6(a).

(c)(1) Owners and operators of facilities that store recyclable materials before they are recycled are regulated under all applicable provisions of Rules R315-264 and 265, and under Rules R315-266, 268, 270 and 124 and the notification requirements under section 3010 of RCRA, except as provided in Subsection R315-261-6(a). The recycling process itself is exempt from regulation except as provided in Subsection R315-261-6(d).

(2) Owners or operators of facilities that recycle recyclable materials without storing them before they are recycled are subject to the following requirements, except as provided in R315-261-6(a):

(i) Notification requirements under section 3010 of RCRA;

(ii) 40 CFR 265.71 and 72, which are adopted by reference; dealing with the use of the manifest and manifest discrepancies;

(iii) Subsection R315-261-6(d); and

(iv) Section R315-265-75, addressing biennial reporting

requirements.

(d) Owners or operators of facilities subject to permitting requirements under Section 19-6-108 with hazardous waste management units that recycle hazardous wastes are subject to the requirements of Sections R315-264-1030 through 1036; and Sections R315-264-1050 through 1065; 40 CFR 265.1030 through 1035, which are adopted and incorporated by reference; or 40 CFR 265.1050 through 1064.

R315-261-7. Residues of Hazardous Waste in Empty Containers.

(a)(1) Any hazardous waste remaining in either: an empty container; or an inner liner removed from an empty container, as defined in Subsection R315-261-7(b), is not subject to regulation under Rules R315-261 through 266, 268, 270 or 124 or to the notification requirements of section 3010 of RCRA.

(2) Any hazardous waste in either a container that is not empty or an inner liner removed from a container that is not empty, as defined in Subsection R315-261-7(b), is subject to regulation under Rules R315-261 through 266, 268, 270 and 124 and to the notification requirements of section 3010 of RCRA.

(b)(1) A container or an inner liner removed from a container that has held any hazardous waste, except a waste that is a compressed gas or that is identified as an acute hazardous waste listed in Section R315-261-31 or Subsection R315-261-33(e) is empty if:

(i) All wastes have been removed that can be removed using the practices commonly employed to remove materials from that type of container, e.g., pouring, pumping, and aspirating, and

(ii) No more than 2.5 centimeters, one inch, of residue remain on the bottom of the container or inner liner, or

(iii)(A) No more than three percent by weight of the total capacity of the container remains in the container or inner liner if the container is less than or equal to 119 gallons in size; or

(B) No more than 0.3 percent by weight of the total capacity of the container remains in the container or inner liner if the container is greater than 119 gallons in size.

(2) A container that has held a hazardous waste that is a compressed gas is empty when the pressure in the container approaches atmospheric.

(3) A container or an inner liner removed from a container that has held an acute hazardous waste listed in Section R315-261-31 or Subsection R315-261-33(e) is empty if:

(i) The container or inner liner has been triple rinsed using a solvent capable of removing the commercial chemical product or manufacturing chemical intermediate;

(ii) The container or inner liner has been cleaned by another method that has been shown in the scientific literature, or by tests conducted by the generator, to achieve equivalent removal; or

(iii) In the case of a container, the inner liner that prevented contact of the commercial chemical product or manufacturing chemical intermediate with the container, has been removed.

R315-261-8. PCB Wastes Regulated Under Toxic Substance Control Act.

The disposal of PCB-containing dielectric fluid and electric equipment containing such fluid authorized for use and regulated under 40 CFR 761 and that are hazardous only because they fail the test for the Toxicity Characteristic. Hazardous Waste Codes D018 through D043 only, are exempt from regulation under Rules R315-261 through 265, 268, 270 and 124, and the notification requirements of section 3010 of RCRA.

R315-261-9. Requirements for Universal Waste.

The wastes listed in Section R315-261-9 are exempt from regulation under Rules R315-262 through 270 except as specified in Rule R315-273 and, therefore are not fully regulated as hazardous waste. The wastes listed in Section R315-261-9 are subject to regulation under Rule R315-273:

(a) Batteries as described in Section R315-273-2;

(b) Pesticides as described in Section R315-273-3;

(c) Mercury-containing equipment as described in Section R315-273-4; and

(d) Lamps as described in Section R315-273-5.

(e) Antifreeze as described in Subsection R315-273-6(a).

(f) Aerosol cans as described in Subsection R315-273-6(b).

R315-261-10. Criteria for Identifying the Characteristics of Hazardous Waste.

(a) The Board shall identify and define a characteristic of hazardous waste in Sections R315-261-20 through 24 only upon determining that:

(1) A solid waste that exhibits the characteristic may:

(i) Cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or

(ii) Pose a substantial present or potential hazard to human health or the environment when it is improperly treated, stored, transported, disposed of or otherwise managed; and

(2) The characteristic can be:

(i) Measured by an available standardized test method which is reasonably within the capability of generators of solid waste or private sector laboratories that are available to serve generators of solid waste; or

(ii) Reasonably detected by generators of solid waste through their knowledge of their waste.

R315-261-11. Criteria for Listing Hazardous Waste.

(a) The Board shall list a solid waste as a hazardous waste only upon determining that the solid waste meets one of the following criteria:

(1) It exhibits any of the characteristics of hazardous waste identified in Sections R315-261-20 through 24.

(2) It has been found to be fatal to humans in low doses or, in the absence of data on human toxicity, it has been shown in studies to have an oral LD 50 toxicity, rat, of less than 50 milligrams per kilogram, an inhalation LC 50 toxicity, rat, of less than 2 milligrams per liter, or a dermal LD 50 toxicity, rabbit, of less than 200 milligrams per kilogram or is otherwise capable of causing or significantly contributing to an increase in serious irreversible, or incapacitating reversible, illness. Waste listed in accordance with these criteria shall be designated Acute Hazardous Waste.

(3) It contains any of the toxic constituents listed in Rule R315-261 appendix VIII and, after considering the following factors, the Board concludes that the waste is capable of posing a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported or disposed of, or otherwise managed:

(i) The nature of the toxicity presented by the constituent.

(ii) The concentration of the constituent in the waste.

(iii) The potential of the constituent or any toxic degradation product of the constituent to migrate from the waste into the environment under the types of improper management considered in Subsection R315-261-11(a)(3)(vii).

(iv) The persistence of the constituent or any toxic degradation product of the constituent.

(v) The potential for the constituent or any toxic degradation product of the constituent to degrade into non-harmful constituents and the rate of degradation.

(vi) The degree to which the constituent or any degradation product of the constituent bioaccumulates in

ecosystems.

(vii) The plausible types of improper management to which the waste could be subjected.

(viii) The quantities of the waste generated at individual generation sites or on a regional or national basis.

(ix) The nature and severity of the human health and environmental damage that has occurred as a result of the improper management of wastes containing the constituent.

(x) Action taken by other governmental agencies or regulatory programs based on the health or environmental hazard posed by the waste or waste constituent.

(xi) Such other factors as may be appropriate. Substances shall be listed on appendix VIII of Rule R315-261 only if they have been shown in scientific studies to have toxic, carcinogenic, mutagenic or teratogenic effects on humans or other life forms. Wastes listed in accordance with these criteria shall be designated Toxic wastes.

(b) The Board may list classes or types of solid waste as hazardous waste if it has reason to believe that individual wastes, within the class or type of waste, typically or frequently are hazardous under the definition of hazardous waste found in Section 19-6-102.

(c) The Board shall use the criteria for listing specified in Section R315-261-11 to establish the exclusion limits referred to in Subsection R315-261-5(c).

R315-261-20. Characteristics of Hazardous Waste - General.

(a) A solid waste, as defined in Section R315-261-2, which is not excluded from regulation as a hazardous waste under Subsection R315-261-4(b), is a hazardous waste if it exhibits any of the characteristics identified in Sections R315-261-20 through 24.

(b) A hazardous waste which is identified by a characteristic in Sections R315-261-20 through 24 is assigned every EPA Hazardous Waste Number that is applicable as set forth in Sections R315-261-20 through 24. This number shall be used in complying with the notification requirements of section 3010 of RCRA and all applicable recordkeeping and reporting requirements under Rules R315-262 through 265, 268 and 270.

(c) For purposes of Sections R315-261-20 through 24, the Board shall consider a sample obtained using any of the applicable sampling methods specified in appendix I of Rule R315-261 to be a representative sample within the meaning of Rule R315-260.

R315-261-21. Characteristics of Hazardous Waste - Characteristic of Ignitability.

(a) A solid waste exhibits the characteristic of ignitability if a representative sample of the waste has any of the following properties:

(1) It is a liquid, other than an aqueous solution containing less than 24 percent alcohol by volume and has flash point less than 60 degrees C (140 degrees F), as determined by a Pensky-Martens Closed Cup Tester, using the test method specified in ASTM Standard D 93-79 or D 93-80, see Section R315-260-11, or a Setaflash Closed Cup Tester, using the test method specified in ASTM Standard D 3278-78, see Section R315-260-11.

(2) It is not a liquid and is capable, under standard temperature and pressure, of causing fire through friction, absorption of moisture or spontaneous chemical changes and, when ignited, burns so vigorously and persistently that it creates a hazard.

(3) It is an ignitable compressed gas.

(i) The term "compressed gas" shall designate any material or mixture having in the container an absolute pressure exceeding 40 p.s.i. at 70 degrees Fahrenheit or, regardless of the pressure at 70 degrees Fahrenheit, having an absolute pressure exceeding 104 p.s.i. at 130 degrees Fahrenheit; or any

liquid flammable material having a vapor pressure exceeding 40 p.s.i. absolute at 100 degrees Fahrenheit as determined by ASTM Test D-323.

(ii) A compressed gas shall be characterized as ignitable if any one of the following occurs:

(A) Either a mixture of 13 percent or less, by volume, with air forms a flammable mixture or the flammable range with air is wider than 12 percent regardless of the lower limit. These limits shall be determined at atmospheric temperature and pressure. The method of sampling and test procedure shall be acceptable to the Bureau of Explosives and approved by the director, Pipeline and Hazardous Materials Technology, U.S. Department of Transportation, see Note 2.

(B) Using the Bureau of Explosives' Flame Projection Apparatus, see Note 1, the flame projects more than 18 inches beyond the ignition source with valve opened fully, or, the flame flashes back and burns at the valve with any degree of valve opening.

(C) Using the Bureau of Explosives' Open Drum Apparatus, see Note 1, there is any significant propagation of flame away from the ignition source.

(D) Using the Bureau of Explosives' Closed Drum Apparatus, see Note 1, there is any explosion of the vapor-air mixture in the drum.

(4) It is an oxidizer. An oxidizer for the purpose of this subchapter is a substance such as a chlorate, permanganate, inorganic peroxide, or a nitrate, that yields oxygen readily to stimulate the combustion of organic matter (see Note 4).

(i) An organic compound containing the bivalent -O-O- structure and which may be considered a derivative of hydrogen peroxide where one or more of the hydrogen atoms have been replaced by organic radicals shall be classed as an organic peroxide unless:

(A) The material meets the definition of a Class A explosive or a Class B explosive, as defined in Subsection R315-261-23(a)(8), in which case it shall be classed as an explosive,

(B) The material is forbidden to be offered for transportation according to 49 CFR 172.101 and 49 CFR 173.21,

(C) It is determined that the predominant hazard of the material containing an organic peroxide is other than that of an organic peroxide, or

(D) According to data on file with the Pipeline and Hazardous Materials Safety Administration in the U.S. Department of Transportation (see Note 3), it has been determined that the material does not present a hazard in transportation.

(b) A solid waste that exhibits the characteristic of ignitability has the EPA Hazardous Waste Number of D001.

Note 1: A description of the Bureau of Explosives' Flame Projection Apparatus, Open Drum Apparatus, Closed Drum Apparatus, and method of tests may be procured from the Bureau of Explosives.

Note 2: As part of a U.S. Department of Transportation (DOT) reorganization, the Office of Hazardous Materials Technology (OHMT), which was the office listed in the 1980 publication of 49 CFR 173.300 for the purposes of approving sampling and test procedures for a flammable gas, ceased operations on February 20, 2005. OHMT programs have moved to the Pipeline and Hazardous Materials Safety Administration (PHMSA) in the DOT.

Note 3: As part of a U.S. Department of Transportation (DOT) reorganization, the Research and Special Programs Administration (RSPA), which was the office listed in the 1980 publication of 49 CFR 173.151a for the purposes of determining that a material does not present a hazard in transport, ceased operations on February 20, 2005. RSPA programs have moved to the Pipeline and Hazardous Materials Safety Administration

(PHMSA) in the DOT.

Note 4: The DOT regulatory definition of an oxidizer was contained in Section 173.151 of 49 CFR, and the definition of an organic peroxide was contained in paragraph 173.151a. An organic peroxide is a type of oxidizer.

R315-261-22. Characteristics of Hazardous Waste - Characteristic of Corrosivity.

(a) A solid waste exhibits the characteristic of corrosivity if a representative sample of the waste has either of the following properties:

(1) It is aqueous and has a pH less than or equal to 2 or greater than or equal to 12.5, as determined by a pH meter using Method 9040C in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, see Section R315-260-11 which incorporates 40 CFR 260.11 by reference.

(2) It is a liquid and corrodes steel (SAE 1020) at a rate greater than 6.35 mm (0.250 inch) per year at a test temperature of 55 degrees C (130 degrees F) as determined by Method 1110A in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, see Section R315-260-11 which incorporates 40 CFR 260.11 by reference.

(b) A solid waste that exhibits the characteristic of corrosivity has the EPA Hazardous Waste Number of D002.

R315-261-23. Characteristics of Hazardous Waste - Characteristic of Reactivity.

(a) A solid waste exhibits the characteristic of reactivity if a representative sample of the waste has any of the following properties:

(1) It is normally unstable and readily undergoes violent change without detonating.

(2) It reacts violently with water.

(3) It forms potentially explosive mixtures with water.

(4) When mixed with water, it generates toxic gases, vapors or fumes in a quantity sufficient to present a danger to human health or the environment.

(5) It is a cyanide or sulfide bearing waste which, when exposed to pH conditions between 2 and 12.5, can generate toxic gases, vapors or fumes in a quantity sufficient to present a danger to human health or the environment.

(6) It is capable of detonation or explosive reaction if it is subjected to a strong initiating source or if heated under confinement.

(7) It is readily capable of detonation or explosive decomposition or reaction at standard temperature and pressure.

(8) It is a forbidden explosive as defined in 49 CFR 173.54, or is a Division 1.1, 1.2 or 1.3 explosive as defined in 49 CFR 173.50 and 173.53.

(b) A solid waste that exhibits the characteristic of reactivity has the EPA Hazardous Waste Number of D003.

R315-261-24. Characteristics of Hazardous Waste - Toxicity Characteristic.

(a) A solid waste (except manufactured gas plant waste) exhibits the characteristic of toxicity if, using the Toxicity Characteristic Leaching Procedure, test Method 1311 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, see Section R315-260-11, the extract from a representative sample of the waste contains any of the contaminants listed in Table 1 at the concentration equal to or greater than the respective value given in that Table 1. Where the waste contains less than 0.5 percent filterable solids, the waste itself, after filtering using the methodology outlined in Method 1311, is considered to be the extract for the purpose of Section R315-261-24.

(b) A solid waste that exhibits the characteristic of toxicity

has the EPA Hazardous Waste Number specified in Table 1 which corresponds to the toxic contaminant causing it to be hazardous.

TABLE 1
Maximum Concentration of Contaminants for the Toxicity Characteristic

PA HW(1)	Contaminant CAS(2)	Regulatory Level (mg/L)
D004	Arsenic 7440-38-2	5.0
D005	Barium 7440-39-3	100.0
D018	Benzene 71-43-2	0.5
D006	Cadmium 7440-43-9	1.0
D019	Carbon tetrachloride 56-23-5	0.5
D020	Chlordane 57-74-9	0.03
D021	Chlorobenzene 108-90-7	100.0
D022	Chloroform 67-66-3	6.0
D007	Chromium 7440-47-3	5.0
D023	o-Cresol 95-48-7	200.0(4)
D024	m-Cresol 108-39-4	200.0(4)
D025	p-Cresol 106-44-5	200.0(4)
D026	Cresol 200.0(4)	200.0(4)
D016	2,4-D 94-75-7	10.0
D027	1,4-Dichlorobenzene 106-46-7	7.5
D028	1,2-Dichloroethane 107-06-2	0.5
D029	1,1-Dichloroethylene 75-35-4	0.7
D030	2,4-Dinitrotoluene 121-14-2	0.13(3)
D012	Endrin 72-20-8	0.02
D031	Heptachlor (and its epoxide) 76-44-8	0.008
D032	Hexachlorobenzene 118-74-1	0.13(3)
D033	Hexachlorobutadiene 87-68-3	0.5
D034	Hexachloroethane 67-72-1	3.0
D008	Lead 7439-92-1	5.0
D013	Lindane 58-89-9	0.4
D009	Mercury 7439-97-6	0.2
D014	Methoxychlor 72-43-5	10.0
D035	Methyl ethyl ketone 78-93-3	200.0
D036	Nitrobenzene 98-95-3	2.0
D037	Pentachlorophenol 87-86-5	100.0
D038	Pyridine 110-86-1	5.0(3)
D010	Selenium 7782-49-2	1.0
D011	Silver 7440-22-4	5.0
D039	Tetrachloroethylene 127-18-4	0.7
D015	Toxaphene 8001-35-2	0.5
D040	Trichloroethylene 79-01-6	0.5
D04	2,4,5-Trichlorophenol 95-95-4	400.0
D042	2,4,6-Trichlorophenol 88-06-2	2.0
D017	2,4,5-TP (Silvex) 93-72-1	1.0
D043	Vinyl chloride 75-01-4	0.2

(1) Hazardous waste number.
 (2) Chemical abstracts service number.
 (3) Quantitation limit is greater than the calculated regulatory level. The quantitation limit therefore becomes the regulatory level.
 (4) If o-, m-, and p-Cresol concentrations cannot be differentiated, the total cresol (D026) concentration is used. The regulatory level of total cresol is 200 mg/l.

R315-261-30. Lists of Hazardous Wastes - General.

(a) A solid waste is a hazardous waste if it is listed in Sections R315-261-30 through 35, unless it has been excluded from this list under Sections R315-260.20 and 22.

(b) The Board shall indicate the basis for listing the classes or types of wastes listed in Sections R315-261-30 through 35 by employing one or more of the following Hazard Codes:

- (1) Ignitable Waste: (I)
- (2) Corrosive Waste: (C)
- (3) Reactive Waste: (R)

- (4) Toxicity Characteristic Waste: (E)
- (5) Acute Hazardous Waste: (H)
- (6) Toxic Waste: (T)

Appendix VII identifies the constituent which caused the Board to list the waste as a Toxicity Characteristic Waste or Toxic Waste in Sections R315-261-31 and 32.

(c) Each hazardous waste listed in Sections R315-261-30 through 35 is assigned an EPA Hazardous Waste Number which precedes the name of the waste. This number shall be used in complying with the notification requirements of Section 3010 of the RCRA and certain recordkeeping and reporting requirements under Rules R315-262 through 265, 268, and 270.

(d) The following hazardous wastes listed in Section R315-261-31 are subject to the exclusion limits for acutely hazardous wastes established in Section R315-261-5: EPA Hazardous Wastes Nos. F020, F021, F022, F023, F026 and F027.

R315-261-31. Lists of Hazardous Wastes - Hazardous Wastes from Non-Specific Sources.

(a) The following solid wastes are listed hazardous wastes from non-specific sources unless they are excluded under Sections R315-260-20 and 22 and listed in R315-260 appendix IX which incorporates 40 CFR 260 appendix IX by reference.

TABLE 2
Hazardous Wastes From Non-specific Sources

Industry and EPA hazardous waste No. Generic:	Hazardous waste	Hazard Code
F001	The following spent halogenated solvents used in degreasing: Tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, and chlorinated fluorocarbons; all spent solvent mixtures/blends used in degreasing containing, before use, a total of ten percent or more, by volume, of one or more of the above halogenated solvents or those solvents listed in F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures	(T)
F002	The following spent halogenated solvents: Tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, ortho-dichlorobenzene, trichlorofluoromethane, and 1,1,2-trichloroethane; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those listed in F001, F004, or F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures	(T)
F003	The following spent non-halogenated solvents: Xylene, acetone, ethyl acetate, ethyl benzene, methyl isobutyl ketone, n-butyl alcohol, cyclohexanone, and methanol; all spent solvent mixtures/blends containing, before use, only the above spent non-halogenated solvents; and all spent solvent mixtures/blends containing, before use, one or more of the above non-halogenated solvents, and, a total of ten percent or more (by volume) of one or more of those solvents listed in F001, F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures	(I)*
F004	The following spent non-halogenated solvents: Cresols and cresylic acid, and nitrobenzene; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above non-halogenated solvents	(T)

	or those solvents listed in F001, F002, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures	
F005	The following spent non-halogenated solvents: Toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, benzene, 2-ethoxyethanol, and 2-nitropropane; all spent solvent mixtures/blends containing, before use, a total of ten percent or more, by volume, of one or more of the above non-halogenated solvents or those solvents listed in F001, F002, or F004; and still bottoms from the recovery of these spent solvents and spent solvent mixtures	(I,T)
F006	Wastewater treatment sludges from electroplating operations except from the following processes: (1) Sulfuric acid anodizing of aluminum; (2) tin plating on carbon steel; (3) zinc plating, segregated basis, on carbon steel; (4) aluminum or zinc-aluminum plating on carbon steel; (5) cleaning/stripping associated with tin, zinc and aluminum plating on carbon steel; and (6) chemical etching and milling of aluminum	(T)
F007	Spent cyanide plating bath solutions from electroplating operations	(R,T)
F008	Plating bath residues from the bottom of plating baths from electroplating operations where cyanides are used in the process	(R,T)
F009	Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process	(R,T)
F010	Quenching bath residues from oil baths from metal heat treating operations where cyanides are used in the process	(R,T)
F011	Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations	(R,T)
F012	Quenching waste water treatment sludges from metal heat treating operations where cyanides are used in the process	(T)
F019	Wastewater treatment sludges from the chemical conversion coating of aluminum except from zirconium phosphating in aluminum can washing when such phosphating is an exclusive conversion coating process. Wastewater treatment sludges from the manufacturing of motor vehicles using a zinc phosphating process will not be subject to this listing at the point of generation if the wastes are not placed outside on the land prior to shipment to a landfill for disposal and are either: disposed in a Subtitle D municipal or industrial landfill unit that is equipped with a single clay liner and is permitted, licensed or otherwise authorized by the state; or disposed in a landfill unit subject to, or otherwise meeting, the landfill requirements in Sections R315-258-40, R315-264-301 or 40 CFR 265.301, which is adopted by reference. For the purposes of this listing, motor vehicle manufacturing is defined in Subsection R315-261-31(b)(4)(i) and Subsection R315-261-31(b)(4)(ii)	(T)
F020	Wastes, except wastewater and spent carbon from hydrogen chloride purification, from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- or tetrachlorophenol, or of intermediates used to produce their pesticide derivatives. This listing does not include wastes from the production of Hexachlorophene from highly purified 2,4,5-trichlorophenol.	(H)
F021	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the	(H)

	production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of pentachlorophenol, or of intermediates used to produce its derivatives		preserving processes that use creosote and/or pentachlorophenol
F022	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the manufacturing use; as a reactant, chemical intermediate, or component in a formulating process; of tetra-, penta-, or hexachlorobenzenes under alkaline conditions	(H)	
F023	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the production or manufacturing use; as a reactant, chemical intermediate, or component in a formulating process; of tri- and tetrachlorophenols. This listing does not include wastes from equipment used only for the production or use of Hexachlorophene from highly purified 2,4,5-trichlorophenol.	(H)	
F024	Process wastes, including but not limited to, distillation residues, heavy ends, tars, and reactor clean-out wastes, from the production of certain chlorinated aliphatic hydrocarbons by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution. This listing does not include wastewaters, wastewater treatment sludges, spent catalysts, and wastes listed in Sections R315-261.31 or 32.	(T)	
F025	Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution	(T)	
F026	Wastes, except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the manufacturing use, as a reactant, chemical intermediate, or component in a formulating process, of tetra-, penta-, or hexachlorobenzene under alkaline conditions	(H)	
F027	Discarded unused formulations containing tri-, tetra-, or pentachlorophenol or discarded unused formulations containing compounds derived from these chlorophenols. This listing does not include formulations containing Hexachlorophene synthesized from prepurified 2,4,5-trichlorophenol as the sole component.	(H)	
F028	Residues resulting from the incineration or thermal treatment of soil contaminated with EPA Hazardous Waste Nos. F020, F021, F022, F023, F026, and F027	(T)	
F032	Wastewaters, except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that currently use or have previously used chlorophenolic formulations, except potentially cross-contaminated wastes that have had the F032 waste code deleted in accordance with Section R315-261-35 or potentially cross-contaminated wastes that are otherwise currently regulated as hazardous wastes, i.e., F034 or F035, and where the generator does not resume or initiate use of chlorophenolic formulations. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood	(T)	
F034	Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use creosote formulations. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol	(T)	
F035	Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use inorganic preservatives containing arsenic or chromium. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol	(T)	
F037	Petroleum refinery primary oil/water/solids separation sludge-Any sludge generated from the gravitational separation of oil/water/solids during the storage or treatment of process wastewaters and oily cooling wastewaters from petroleum refineries. Such sludges include, but are not limited to, those generated in oil/water/solids separators; tanks and impoundments; ditches and other conveyances; sumps; and stormwater units receiving dry weather flow. Sludge generated in stormwater units that do not receive dry weather flow, sludges generated from non-contact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges generated in aggressive biological treatment units as defined in Subsection R315-261-31(b)(2), including sludges generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units, and K051 wastes are not included in this listing. This listing does include residuals generated from processing or recycling oil-bearing hazardous secondary materials excluded under Subsection R315-261-4(a)(12)(i), if those residuals are to be disposed of	(T)	
F038	Petroleum refinery secondary (emulsified) oil/water/solids separation sludge-Any sludge and/or float generated from the physical and/or chemical separation of oil/water/solids in process wastewaters and oily cooling wastewaters from petroleum refineries. Such wastes include, but are not limited to, all sludges and floats generated in: induced air flotation (IAF) units, tanks and impoundments, and all sludges generated in DAF units. Sludges generated in stormwater units that do not receive dry weather flow, sludges generated from non-contact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges and floats generated in aggressive biological treatment units as defined in Subsection R315-261-31(b)(2), including sludges and floats generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units) and F037, K048, and K051 wastes are not included in this listing	(T)	
F039	Leachate (liquids that have percolated through land disposed wastes) resulting from the disposal of more than one restricted waste classified as hazardous under Sections R316-261-30 through 35. Leachate resulting from the disposal of one or more of the following EPA Hazardous Wastes and no other Hazardous Wastes retains its EPA Hazardous Waste Number(s): F020, F021, F022, F026, F027, and/or F028.	(T)	

F999 Residues from demilitarization, treatment, and testing of nerve, military, and chemical agents CX, GA, GB, GD, H, HD, HL, HN-1, HN-2, HN-3, HT, L, T, and VX. R,T,C,H

*(I,T) should be used to specify mixtures that are ignitable and contain toxic constituents.

(b) Listing Specific Definitions:

(1) For the purposes of the F037 and F038 listings, oil/water/solids is defined as oil and/or water and/or solids.

(2)(i) For the purposes of the F037 and F038 listings, aggressive biological treatment units are defined as units which employ one of the following four treatment methods: activated sludge; trickling filter; rotating biological contactor for the continuous accelerated biological oxidation of wastewaters; or high-rate aeration. High-rate aeration is a system of surface impoundments or tanks, in which intense mechanical aeration is used to completely mix the wastes, enhance biological activity, and

(A) the units employ a minimum of 6 hp per million gallons of treatment volume; and either

(B) the hydraulic retention time of the unit is no longer than 5 days; or

(C) the hydraulic retention time is no longer than 30 days and the unit does not generate a sludge that is a hazardous waste by the Toxicity Characteristic.

(ii) Generators and treatment, storage and disposal facilities have the burden of proving that their sludges are exempt from listing as F037 and F038 wastes under this definition. Generators and treatment, storage and disposal facilities shall maintain, in their operating or other onsite records, documents and data sufficient to prove that:

(A) the unit is an aggressive biological treatment unit as defined in this subsection; and

(B) the sludges sought to be exempted from the definitions of F037 and/or F038 were actually generated in the aggressive biological treatment unit.

(3)(i) For the purposes of the F037 listing, sludges are considered to be generated at the moment of deposition in the unit, where deposition is defined as at least a temporary cessation of lateral particle movement.

(ii) For the purposes of the F038 listing,

(A) sludges are considered to be generated at the moment of deposition in the unit, where deposition is defined as at least a temporary cessation of lateral particle movement and

(B) floats are considered to be generated at the moment they are formed in the top of the unit.

(4) For the purposes of the F019 listing, the following apply to wastewater treatment sludges from the manufacturing of motor vehicles using a zinc phosphating process.

(i) Motor vehicle manufacturing is defined to include the manufacture of automobiles and light trucks/utility vehicles, including light duty vans, pick-up trucks, minivans, and sport utility vehicles. Facilities shall be engaged in manufacturing complete vehicles, body and chassis or unibody, or chassis only.

(ii) Generators shall maintain in their on-site records documentation and information sufficient to prove that the wastewater treatment sludges to be exempted from the F019 listing meet the conditions of the listing. These records shall include: the volume of waste generated and disposed of off site; documentation showing when the waste volumes were generated and sent off site; the name and address of the receiving facility; and documentation confirming receipt of the waste by the receiving facility. Generators shall maintain these documents on site for no less than three years. The retention period for the documentation is automatically extended during the course of any enforcement action or as requested by the Director.

R315-261-32. Lists of Hazardous Wastes - Hazardous

Wastes from Specific Sources.

(a) The following solid wastes are listed hazardous wastes from specific sources unless they are excluded under Sections R315-260-20 and 22 and listed in appendix IX.

TABLE

Industry and EPA hazardous waste No.	Hazardous waste	Hazard code
Wood preservation: K001	Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote and/or pentachlorophenol	(T)
Inorganic pigments: K002	Wastewater treatment sludge from the production of chrome yellow and orange pigments	(T)
K003	Wastewater treatment sludge from the production of molybdate orange pigments	(T)
K004	Wastewater treatment sludge from the production of zinc yellow pigments	(T)
K005	Wastewater treatment sludge from the production of chrome green pigments	(T)
K006	Wastewater treatment sludge from the production of chrome oxide green pigments, anhydrous and hydrated,	(T)
K007	Wastewater treatment sludge from the production of iron blue pigments	(T)
K008	Oven residue from the production of chrome oxide green pigments	(T)
Organic chemicals: K009	Distillation bottoms from the production of acetaldehyde from ethylene	(T)
K010	Distillation side cuts from the production of acetaldehyde from ethylene	(T)
K011	Bottom stream from the wastewater stripper in the production of acrylonitrile	(R,T)
K013	Bottom stream from the acetonitrile column in the production of acrylonitrile	(R,T)
K014	Bottoms from the acetonitrile purification column in the production of acrylonitrile	(T)
K015	Still bottoms from the distillation of benzyl chloride	(T)
K016	Heavy ends or distillation residues from the production of carbon tetrachloride	(T)
K017	Heavy ends (still bottoms) from the purification column in the production of epichlorohydrin	(T)
K018	Heavy ends from the fractionation column in ethyl chloride production	(T)
K019	Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production	(T)
K020	Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production	(T)
K021	Aqueous spent antimony catalyst waste from fluoromethanes production	(T)
K022	Distillation bottom tars from the production of phenol/acetone from cumene	(T)
K023	Distillation light ends from the production of phthalic anhydride from naphthalene	(T)

K024	Distillation bottoms from the production of phthalic anhydride from naphthalene	(T)		toluenediamine in the production of toluediamine via hydrogenation of dinitrotoluene
K025	Distillation bottoms from the production of nitrobenzene by the nitration of benzene	(T)	K116	Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluediamine
K026	Stripping still tails from the production of methy ethyl pyridines	(T)		
K027	Centrifuge and distillation residues from toluene diisocyanate production	(R,T)	K117	Wastewater from the reactor vent gas scrubber in the production of ethylene dibromide via bromination of ethane
K028	Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1-trichloroethane	(T)	K118	Spent adsorbent solids from purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethane
K029	Waste from the product steam stripper in the production of 1,1,1-trichloroethane	(T)	K136	Still bottoms from the purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethane
K030	Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene	(T)	K149	Distillation bottoms from the production of alpha-, or methyl-, chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups. This waste does not include still bottoms from the distillation of benzyl chloride.
K083	Distillation bottoms from aniline production	(T)		
K085	Distillation or fractionation column bottoms from the production of chlorobenzenes	(T)	K150	Organic residuals, excluding spent carbon adsorbent, from the spent chlorine gas and hydrochloric acid recovery processes associated with the production of alpha-, or methyl-, chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups
K093	Distillation light ends from the production of phthalic anhydride from ortho-xylene	(T)		
K094	Distillation bottoms from the production of phthalic anhydride from ortho-xylene	(T)		
K095	Distillation bottoms from the production of 1,1,1-trichloroethane	(T)	K151	Wastewater treatment sludges, excluding neutralization and biological sludges, generated during the treatment of wastewaters from the production of alpha-, or methyl-, chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups
K096	Heavy ends from the heavy ends column from the production of 1,1,1-trichloroethane	(T)		
K103	Process residues from aniline extraction from the production of aniline	(T)		
K104	Combined wastewater streams generated from nitrobenzene/aniline production	(T)	K152	Organic waste, including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates, from the production of carbamates and carbamoyl oximes. This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.
K105	Separated aqueous stream from the reactor product washing step in the production of chlorobenzenes	(T)		
K107	Column bottoms from product separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides	(C,T)	K157	Wastewaters, including scrubber waters, condenser waters, washwaters, and separation waters, from the production of carbamates and carbamoyl oximes. This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.
K108	Condensed column overheads from product separation and condensed reactor vent gases from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides	(I,T)		
K109	Spent filter cartridges from product purification from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides	(T)	K158	Bag house dusts and filter/separation solids from the production of carbamates and carbamoyl oximes. This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.
K110	Condensed column overheads from intermediate separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides	(T)	K159	Organics from the treatment of thiocarbamate wastes
K111	Product washwaters from the production of dinitrotoluene via nitration of toluene	(C,T)	K161	Purification solids; including filtration, evaporation, and centrifugation solids; bag house dust and floor sweepings from the production of dithiocarbamate acids and their salts. This listing does not include K125 or K126.
K112	Reaction by-product water from the drying column in the production of toluediamine via hydrogenation of dinitrotoluene	(T)		
K113	Condensed liquid light ends from the purification of toluediamine in the production of toluediamine via hydrogenation of dinitrotoluene	(T)	K174	Wastewater treatment sludges from the production of ethylene dichloride or vinyl chloride monomer, including sludges that result from commingled ethylene dichloride or vinyl chloride monomer wastewater and other wastewater, unless the sludges meet the following conditions: (i) they are disposed of in a subtitle C or non-hazardous landfill licensed or permitted by the state or federal government; (ii) they are not otherwise placed on the land prior to final disposal; and (iii) the generator maintains
K114	Vicinals from the purification of toluediamine in the production of toluediamine via hydrogenation of dinitrotoluene	(T)		
K115	Heavy ends from the purification of	(T)		

	documentation demonstrating that the waste was either disposed of in an on-site landfill or consigned to a transporter or disposal facility that provided a written commitment to dispose of the waste in an off-site landfill. Respondents in any action brought to enforce the requirements of subtitle C shall, upon a showing by the government that the respondent managed wastewater treatment sludges from the production of vinyl chloride monomer or ethylene dichloride, demonstrate that they meet the terms of the exclusion set forth above. In doing so, they shall provide appropriate documentation, e.g., contracts between the generator and the landfill owner/operator, invoices documenting delivery of waste to landfill, etc., that the terms of the exclusion were met	K178	Residues from manufacturing and manufacturing-site storage of ferric chloride from acids formed during the production of titanium dioxide using the chloride-ilmenite process	(T)	
			Pesticides:		
		K031	By-product salts generated in the production of MSMA and cacodylic acid	(T)	
		K032	Wastewater treatment sludge from the production of chlordane	(T)	
		K033	Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane	(T)	
		K034	Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane	(T)	
K175	Wastewater treatment sludges from the production of vinyl chloride monomer using mercuric chloride catalyst in an acetylene-based process	(T)	K035	Wastewater treatment sludges generated in the production of creosote	(T)
K181	Nonwastewaters from the production of dyes and/or pigments, including nonwastewaters commingled at the point of generation with nonwastewaters from other processes, that, at the point of generation, contain mass loadings of any of the constituents identified in Subsection R315-261-32(c) that are equal to or greater than the corresponding Subsection R315-261-32(c) levels, as determined on a calendar year basis. These wastes will not be hazardous if the nonwastewaters are:	(T)	K036	Still bottoms from toluene reclamation distillation in the production of disulfoton	(T)
	(i) disposed in a Class I or V lined landfill,		K037	Wastewater treatment sludges from the production of disulfoton	(T)
	(ii) disposed in a hazardous waste landfill unit subject to either Section R315-264-301 or 40 CFR 265.301, which is adopted by reference,		K038	Wastewater from the washing and stripping of phorate production	(T)
	(iii) disposed in other landfill units that are Class I or V lined landfills regulated under Rules R315-301 through 320 or meet the design criteria in Sections R315-264-301, or 40 CFR 265.301, which is adopted by reference, or		K039	Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate	(T)
	(iv) treated in a combustion unit that is permitted under Rules R315-260 through 270, or an onsite combustion unit that is permitted under the Clean Air Act. For the purposes of this listing, dyes and/or pigments production is defined in Subsection R315-261-32(b)(1). Section R315-261-32(d) describes the process for demonstrating that a facility's nonwastewaters are not K181. This listing does not apply to wastes that are otherwise identified as hazardous under Sections R315-261-21 through 24 and R315-261-31 through 33 at the point of generation. Also, the listing does not apply to wastes generated before any annual mass loading limit is met		K040	Wastewater treatment sludge from the production of phorate	(T)
			K041	Wastewater treatment sludge from the production of toxaphene	(T)
			K042	Heavy ends or distillation residues from the distillation of tetrachlorobenzene in the production of 2,4,5-T	(T)
			K043	2,6-Dichlorophenol waste from the production of 2,4-D	(T)
			K097	Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane	(T)
			K098	Untreated process wastewater from the production of toxaphene	(T)
			K099	Untreated wastewater from the production of 2,4-D	(T)
			K123	Process wastewater (including supernates, filtrates, and washwaters) from the production of ethylenebisdithiocarbamic acid and its salt	(T)
Inorganic chemicals:			K124	Reactor vent scrubber water from the production of ethylenebisdithiocarbamic acid and its salts	(C,T)
K071	Brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used	(T)	K125	Filtration, evaporation, and centrifugation solids from the production of ethylenebisdithiocarbamic acid and its salts	(T)
K073	Chlorinated hydrocarbon waste from the purification step of the diaphragm cell process using graphite anodes in chlorine production	(T)	K126	Baghouse dust and floor sweepings in milling and packaging operations from the production or formulation of ethylenebisdithiocarbamic acid and its salts	(T)
K106	Wastewater treatment sludge from the mercury cell process in chlorine production	(T)	K131	Wastewater from the reactor and spent sulfuric acid from the acid dryer from the production of methyl bromide	(C,T)
K176	Baghouse filters from the production of antimony oxide, including filters from the production of intermediates, e.g., antimony metal or crude antimony oxide	(E)	K132	Spent absorbent and wastewater separator solids from the production of methyl bromide	(T)
K177	Slag from the production of antimony oxide that is speculatively accumulated or disposed, including slag from the production of intermediates, e.g., antimony metal or crude antimony oxide	(T)		Explosives:	

K044	Wastewater treatment sludges from the manufacturing and processing of explosives	(R)		distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds
K045	Spent carbon from the treatment of wastewater containing explosives	(R)		
K046	Wastewater treatment sludges from the manufacturing, formulation and loading of lead-based initiating compounds	(T)	K102	Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds (T)
K047	Pink/red water from TNT operations	(R)	Ink formulation: K086	Solvent washes and sludges, caustic washes and sludges, or water washes and sludges from cleaning tubs and equipment used in the formulation of ink from pigments, driers, soaps, and stabilizers containing chromium and lead (T)
Petroleum refining: K048	Dissolved air flotation (DAF) float from the petroleum refining industry	(T)		
K049	Slop oil emulsion solids from the petroleum refining industry	(T)		
K050	Heat exchanger bundle cleaning sludge from the petroleum refining industry	(T)	Coking: K060	Ammonia still lime sludge from coking operations (T)
K051	API separator sludge from the petroleum refining industry	(T)	K087	Decanter tank tar sludge from coking operations (T)
K052	Tank bottoms, leaded, from the petroleum refining industry	(T)	K141	Process residues from the recovery of coal tar, including, but not limited to, collecting sump residues from the production of coke from coal or the recovery of coke by-products produced from coal. This listing does not include K087, decanter tank tar sludges from coking operations (T)
K169	Crude oil storage tank sediment from petroleum refining operations	(T)		
K170	Clarified slurry oil tank sediment and/or in-line filter/separation solids from petroleum refining operations	(T)		
K171	Spent Hydrotreating catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors, this listing does not include inert support media	(I,T)	K142	Tar storage tank residues from the production of coke from coal or from the recovery of coke by-products produced from coal (T)
K172	Spent Hydrotreating catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors, this listing does not include inert support media	(I,T)	K143	Process residues from the recovery of light oil, including, but not limited to, those generated in stills, decanters, and wash oil recovery units from the recovery of coke by-products produced from coal (T)
Iron and steel: K061	Emission control dust/sludge from the primary production of steel in electric furnaces	(T)	K144	Wastewater sump residues from light oil refining, including, but not limited to, intercepting or contamination sump sludges from the recovery of coke by-products produced from coal (T)
K062	Spent pickle liquor generated by steel finishing operations of facilities within the iron and steel industry, SIC Codes 331 and 332	(C,T)	K145	Residues from naphthalene collection and recovery operations from the recovery of coke by-products produced from coal (T)
Primary aluminum: K088	Spent potliners from primary aluminum reduction	(T)	K147	Tar storage tank residues from coal tar refining (T)
Secondary lead: K069	Emission control dust/sludge from secondary lead smelting. Note: This listing is stayed administratively for sludge generated from secondary acid scrubber systems. The stay will remain in effect until further administrative action is taken. If EPA takes further action effecting this stay, EPA will publish a notice of the action in the Federal Register	(T)	K148	Residues from coal tar distillation, including but not limited to, still bottoms (T)
K100	Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting	(T)		
Veterinary pharmaceuticals: K084	Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds	(T)		
K101	Distillation tar residues from the	(T)		

(b) Listing Specific Definitions:

(1) For the purposes of the K181 listing, dyes and/or pigments production is defined to include manufacture of the following product classes: dyes, pigments, or FDA certified colors that are classified as azo, triarylmethane, perylene or anthraquinone classes. Azo products include azo, monoazo, diazo, triazo, polyazo, azoic, benzidine, and pyrazolone products. Triarylmethane products include both triarylmethane and triphenylmethane products. Wastes that are not generated at a dyes and/or pigments manufacturing site, such as wastes from the offsite use, formulation, and packaging of dyes and/or pigments, are not included in the K181 listing.

(c) K181 Listing Levels. Nonwastewaters containing constituents in amounts equal to or exceeding the following levels during any calendar year are subject to the K181 listing, unless the conditions in the K181 listing are met.

TABLE

Constituent	Chemical abstracts No.	Mass levels (kg/yr)
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Aniline	62-53-3	9,300
o-Anisidine	90-04-0	110
4-Chloroaniline	106-47-8	4,800
p-Cresidine	120-71-8	660
2,4-Dimethylaniline	95-68-1	100
1,2-Phenylenediamine	95-54-5	710
1,3-Phenylenediamine	108-45-2	1,200

(d) Procedures for demonstrating that dyes and/or pigment nonwastewaters are not K181. The procedures described in Subsections R315-261-32(d)(1) through(d)(3) and (d)(5) establish when nonwastewaters from the production of dyes/pigments would not be hazardous, these procedures apply to wastes that are not disposed in landfill units or treated in combustion units as specified in Subsection R315-261-32(a). If the nonwastewaters are disposed in landfill units or treated in combustion units as described in Subsection R315-261-32(a), then the nonwastewaters are not hazardous. In order to demonstrate that it is meeting the landfill disposal or combustion conditions contained in the K181 listing description, the generator shall maintain documentation as described in Subsection R315-261-32(d)(4).

(1) Determination based on no K181 constituents. Generators that have knowledge; e.g., knowledge of constituents in wastes based on prior sampling and analysis data and/or information about raw materials used, production processes used, and reaction and degradation products formed; that their wastes contain none of the K181 constituents, see Subsection R315-261-32(c), can use their knowledge to determine that their waste is not K181. The generator shall document the basis for all such determinations on an annual basis and keep each annual documentation for three years.

(2) Determination for generated quantities of 1,000 MT/yr or less for wastes that contain K181 constituents. If the total annual quantity of dyes and/or pigment nonwastewaters generated is 1,000 metric tons or less, the generator can use knowledge of the wastes; e.g., knowledge of constituents in wastes based on prior analytical data and/or information about raw materials used, production processes used, and reaction and degradation products formed; to conclude that annual mass loadings for the K181 constituents are below the listing levels of Subsection R315-261-32(c). To make this determination, the generator shall:

(i) Each year document the basis for determining that the annual quantity of nonwastewaters expected to be generated will be less than 1,000 metric tons.

(ii) Track the actual quantity of nonwastewaters generated from January 1 through December 31 of each year. If, at any time within the year, the actual waste quantity exceeds 1,000 metric tons, the generator shall comply with the requirements of Subsection R315-261-32(d)(3) for the remainder of the year.

(iii) Keep a running total of the K181 constituent mass loadings over the course of the calendar year.

(iv) Keep the following records on site for the three most recent calendar years in which the hazardous waste determinations are made:

(A) The quantity of dyes and/or pigment nonwastewaters generated.

(B) The relevant process information used.

(C) The calculations performed to determine annual total mass loadings for each K181 constituent in the nonwastewaters during the year.

(3) Determination for generated quantities greater than 1,000 MT/yr for wastes that contain K181 constituents. If the total annual quantity of dyes and/or pigment nonwastewaters generated is greater than 1,000 metric tons, the generator shall perform all of the steps described in Subsections R315-261-32(d)(3)(i) through (d)(3)(xi) in order to make a determination that its waste is not K181.

(i) Determine which K181 constituents, see Subsection R315-261-32(c), are reasonably expected to be present in the

wastes based on knowledge of the wastes; e.g., based on prior sampling and analysis data and/or information about raw materials used, production processes used, and reaction and degradation products formed.

(ii) If 1,2-phenylenediamine is present in the wastes, the generator can use either knowledge or sampling and analysis procedures to determine the level of this constituent in the wastes. For determinations based on use of knowledge, the generator shall comply with the procedures for using knowledge described in Subsection R315-261-32(d)(2) and keep the records described in Subsection R315-261-32(d)(2)(iv). For determinations based on sampling and analysis, the generator shall comply with the sampling and analysis and recordkeeping requirements described in Subsections R315-261-32(d)(3)(iii) through (xi).

(iii) Develop a waste sampling and analysis plan, or modify an existing plan, to collect and analyze representative waste samples for the K181 constituents reasonably expected to be present in the wastes. At a minimum, the plan shall include:

(A) A discussion of the number of samples needed to characterize the wastes fully;

(B) The planned sample collection method to obtain representative waste samples;

(C) A discussion of how the sampling plan accounts for potential temporal and spatial variability of the wastes.

(D) A detailed description of the test methods to be used, including sample preparation, clean up, if necessary, and determinative methods.

(iv) Collect and analyze samples in accordance with the waste sampling and analysis plan.

(A) The sampling and analysis shall be unbiased, precise, and representative of the wastes.

(B) The analytical measurements shall be sufficiently sensitive, accurate and precise to support any claim that the constituent mass loadings are below the listing levels of Subsection R315-261-32(c).

(v) Record the analytical results.

(vi) Record the waste quantity represented by the sampling and analysis results.

(vii) Calculate constituent-specific mass loadings, product of concentrations and waste quantity.

(viii) Keep a running total of the K181 constituent mass loadings over the course of the calendar year.

(ix) Determine whether the mass of any of the K181 constituents listed in Subsection R315-261-32(c) generated between January 1 and December 31 of any year is below the K181 listing levels.

(x) Keep the following records on site for the three most recent calendar years in which the hazardous waste determinations are made:

(A) The sampling and analysis plan.

(B) The sampling and analysis results, including QA/QC data.

(C) The quantity of dyes and/or pigment nonwastewaters generated.

(D) The calculations performed to determine annual mass loadings.

(xi) Nonhazardous waste determinations shall be conducted annually to verify that the wastes remain nonhazardous.

(A) The annual testing requirements are suspended after three consecutive successful annual demonstrations that the wastes are nonhazardous. The generator can then use knowledge of the wastes to support subsequent annual determinations.

(B) The annual testing requirements are reinstated if the manufacturing or waste treatment processes generating the wastes are significantly altered, resulting in an increase of the potential for the wastes to exceed the listing levels.

(C) If the annual testing requirements are suspended, the

generator shall keep records of the process knowledge information used to support a nonhazardous determination. If testing is reinstated, a description of the process change shall be retained.

(4) Recordkeeping for the landfill disposal and combustion exemptions. For the purposes of meeting the landfill disposal and combustion condition set out in the K181 listing description, the generator shall maintain on site for three years documentation demonstrating that each shipment of waste was received by a landfill unit that is subject to or meets the landfill design standards set out in the listing description, or was treated in combustion units as specified in the listing description.

(5) Waste holding and handling. During the interim period, from the point of generation to completion of the hazardous waste determination, the generator is responsible for storing the wastes appropriately. If the wastes are determined to be hazardous and the generator has not complied with the hazardous waste requirements during the interim period, the generator could be subject to an enforcement action for improper management.

R315-261-33. Lists of Hazardous Wastes - Discarded Commercial Chemical Products, Off-Specification Species, Container Residues, and Spill Residues Thereof.

The following materials or items are hazardous wastes if and when they are discarded or intended to be discarded as described in Subsection R315-261-2(a)(2)(i), when they are mixed with waste oil or used oil or other material and applied to the land for dust suppression or road treatment, when they are otherwise applied to the land in lieu of their original intended use or when they are contained in products that are applied to the land in lieu of their original intended use, or when, in lieu of their original intended use, they are produced for use as, or a component of, a fuel, distributed for use as a fuel, or burned as a fuel.

(a) Any commercial chemical product, or manufacturing chemical intermediate having the generic name listed in Subsections R315-261-33(e) or (f).

(b) Any off-specification commercial chemical product or manufacturing chemical intermediate which, if it met specifications, would have the generic name listed in Subsection R315-261-33(e) or (f).

(c) Any residue remaining in a container or in an inner liner removed from a container that has held any commercial chemical product or manufacturing chemical intermediate having the generic name listed in Subsection R315-261-33(e) or (f), unless the container is empty as defined in Subsection R315-261-7(b). Unless the residue is being beneficially used or reused, or legitimately recycled or reclaimed; or being accumulated, stored, transported or treated prior to such use, re-use, recycling or reclamation, the Director considers the residue to be intended for discard, and thus, a hazardous waste. An example of a legitimate re-use of the residue would be where the residue remains in the container and the container is used to hold the same commercial chemical product or manufacturing chemical intermediate it previously held. An example of the discard of the residue would be where the drum is sent to a drum reconditioner who reconditions the drum but discards the residue.

(d) Any residue or contaminated soil, water or other debris resulting from the cleanup of a spill into or on any land or water of any commercial chemical product or manufacturing chemical intermediate having the generic name listed in Subsection R315-261-33(e) or (f), or any residue or contaminated soil, water or other debris resulting from the cleanup of a spill, into or on any land or water, of any off-specification chemical product and manufacturing chemical intermediate which, if it met specifications, would have the generic name listed in Subsection R315-261-33(e) or (f). The phrase "commercial chemical

product or manufacturing chemical intermediate having the generic name listed in..." refers to a chemical substance which is manufactured or formulated for commercial or manufacturing use which consists of the commercially pure grade of the chemical, any technical grades of the chemical that are produced or marketed, and all formulations in which the chemical is the sole active ingredient. It does not refer to a material, such as a manufacturing process waste, that contains any of the substances listed in Subsection R315-261-33(e) or (f). Where a manufacturing process waste is deemed to be a hazardous waste because it contains a substance listed in Subsection R315-261-33(e) or (f), such waste shall be listed in either Sections R315-261-31 or 32 or shall be identified as a hazardous waste by the characteristics set forth in Sections R315-261-20 through 24.

(e) The commercial chemical products, manufacturing chemical intermediates or off-specification commercial chemical products or manufacturing chemical intermediates referred to in Subsections R315-261-33(a) through (d), are identified as acute hazardous wastes (H). For the convenience of the regulated community the primary hazardous properties of these materials have been indicated by the letters T (Toxicity), and R (Reactivity). Absence of a letter indicates that the compound only is listed for acute toxicity. Wastes are first listed in alphabetical order by substance and then listed again in numerical order by Hazardous Waste Number. These wastes and their corresponding EPA Hazardous Waste Numbers are:

TABLE

Hazardous waste No.	Chemical abstracts No.	Substance
P023	107-20-0	Acetaldehyde, chloro-
P002	591-08-2	Acetamide, N-(aminothioxomethyl)-
P057	640-19-7	Acetamide, 2-fluoro-
P058	62-74-8	Acetic acid, fluoro-, sodium salt
P002	591-08-2	1-Acetyl-2-thiourea
P003	107-02-8	Acrolein
P070	116-06-3	Aldicarb
P203	1646-88-4	Aldicarb sulfone.
P004	309-00-2	Aldrin
P005	107-18-6	Allyl alcohol
P006	20859-73-8	Aluminum phosphide (R,T)
P007	2763-96-4	5-(Aminomethyl)-3-isoxazolol
P008	504-24-5	4-Aminopyridine
P009	131-74-8	Ammonium picrate (R)
P119	7803-55-6	Ammonium vanadate
P099	506-61-6	Argentate(1-), bis(cyano-C)-, potassium
P010	7778-39-4	Arsenic acid H3 As04
P012	1327-53-3	Arsenic oxide As2 O3
P011	1303-28-2	Arsenic oxide As2 O5
P011	1303-28-2	Arsenic pentoxide
P012	1327-53-3	Arsenic trioxide
P038	692-42-2	Arsine, diethyl-
P036	696-28-6	Arsonous dichloride, phenyl-
P054	151-56-4	Aziridine
P067	75-55-8	Aziridine, 2-methyl-
P013	542-62-1	Barium cyanide
P024	106-47-8	Benzenamine, 4-chloro-
P077	100-01-6	Benzenamine, 4-nitro-
P028	100-44-7	Benzene, (chloromethyl)-
P042	51-43-4	1,2-Benzenediol, 4-(1-hydroxy-2-(methylamino)ethyl)-, (R)-
P046	122-09-8	Benzenethanamine, alpha,alpha-dimethyl-
P014	108-98-5	Benzenethiol
P127	1563-66-2	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-,methylcarbamate.
P188	57-64-7	Benzoic acid, 2-hydroxy-, compd. with (3aS-cis)-1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethylpyrrolo(2,3-b)indol-5-ylmethylcarbamate ester (1:1).
P001	(1)81-81-2	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, and salts, when present at concentrations greater than 0.3%
P028	100-44-7	Benzyl chloride
P015	7440-41-7	Beryllium powder
P017	598-31-2	Bromoacetone

P018	357-57-3	Brucine	P054	151-56-4	Ethyleneimine
P045	39196-18-4	2-Butanone, 3,3-dimethyl-1-(methylthio)-, O-methylamino)carbonyl) oxime	P097	52-85-7	Famphur
P021	592-01-8	Calcium cyanide	P056	7782-41-4	Fluorine
P021	592-01-8	Calcium cyanide Ca(CN)2	P057	640-19-7	Fluoroacetamide
P189	55285-14-8	Carbamic acid, ((dibutylamino)-thio)methyl-, 2,3-dihydro-2,2-dimethyl-7-benzofuranyl ester.	P058	62-74-8	Fluoroacetic acid, sodium salt
P191	644-64-4	Carbamic acid, dimethyl-, 1-((dimethyl-amino)carbonyl)-5-methyl-1H-pyrazol-3-yl ester.	P198	23422-53-9	Formetanate hydrochloride.
P192	119-38-0	Carbamic acid, dimethyl-, 3-methyl-1-(1-methylethyl)-1H-pyrazol-5-yl ester.	P197	17702-57-7	Formparanate.
P190	1129-41-5	Carbamic acid, methyl-, 3-methylphenyl ester.	P065	628-86-4	Fulminic acid, mercury(2+) salt (R,T)
P127	1563-66-2	Carbofuran.	P059	76-44-8	Heptachlor
P022	75-15-0	Carbon disulfide	P062	757-58-4	Hexaethyl tetraphosphate
P095	75-44-5	Carbonic dichloride	P116	79-19-6	Hydrazinecarbothioamide
P189	55285-14-8	Carbosulfan.	P068	60-34-4	Hydrazine, methyl-
P023	107-20-0	Chloroacetaldehyde	P063	74-90-8	Hydrocyanic acid
P024	106-47-8	p-Chloroaniline	P063	74-90-8	Hydrogen cyanide
P026	5344-82-1	1-(o-Chlorophenyl)thiourea	P096	7803-51-2	Hydrogen phosphide
P027	542-76-7	3-Chloropropionitrile	P060	465-73-6	Isodrin
P029	544-92-3	Copper cyanide	P192	119-38-0	Isolan.
P029	544-92-3	Copper cyanide Cu(CN)	P202	64-00-6	3-Isopropylphenyl N-methylcarbamate.
P202	64-00-6	m-Cumenyl methylcarbamate.	P007	2763-96-4	3(2H)-Isoxazolone, 5-(aminomethyl)-
P030		Cyanides (soluble cyanide salts), not otherwise specified	P196	15339-36-3	Manganese, bis(dimethylcarbamodithioato-S,S')-,
P031	460-19-5	Cyanogen	P196	15339-36-3	Manganese dimethyldithiocarbamate.
P033	506-77-4	Cyanogen chloride	P092	62-38-4	Mercury, (acetato-O)phenyl-
P033	506-77-4	Cyanogen chloride (CN)Cl	P065	628-86-4	Mercury fulminate (R,T)
P034	131-89-5	2-Cyclohexyl-4,6-dinitrophenol	P082	62-75-9	Methanamine, N-methyl-N-nitroso-
P016	542-88-1	Dichloromethyl ether	P064	624-83-9	Methane, isocyanato-
P036	696-28-6	Dichlorophenylarsine	P016	542-88-1	Methane, oxybis(chloro-
P037	60-57-1	Dieldrin	P112	509-14-8	Methane, tetranitro- (R)
P038	692-42-2	Diethylarsine	P118	75-70-7	Methanethiol, trichloro-
P041	311-45-5	Diethyl-p-nitrophenyl phosphate	P198	23422-53-9	Methanimidamide, N,N-dimethyl-N'-(3-((methylamino)-carbonyl)oxy)phenyl)-, monohydrochloride.
P040	297-97-2	0,0-Diethyl 0-pyrazinyl phosphorothioate	P197	17702-57-7	Methanimidamide, N,N-dimethyl-N'-(2-methyl-4-((methylamino)carbonyl)oxy)phenyl)-
P043	55-91-4	Diisopropylfluorophosphate (DFP)	P050	115-29-7	6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide
P004	309-00-2	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexa-chloro-1,4,4a,5,8,8a,-hexahydro-, (1alpha, 4alpha, 4beta, 5alpha,8alpha,8beta)-	P059	76-44-8	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro- 3a,4,7,7a-tetrahydro-
P060	465-73-6	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexa-chloro-1,4,4a,5,8,8a-hexahydro-, (1alpha, 4alpha, 4beta, 5beta, 8beta,8beta)-	P199	2032-65-7	Methiocarb.
P037	60-57-1	2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1alpha, 2beta, 2alpha, 3beta, 6beta, 6alpha,7beta, 7alpha)-	P066	16752-77-5	Methylhydrazine
P051	(1)72-20-8	2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro- 1a,2,2a,3,6,6a,7,7a-octahydro-, (1alpha, 2beta, 2alpha, 3beta, 3alpha, 6alpha, 6beta, 7beta, 7alpha)-, and metabolites	P068	60-34-4	Methyl isocyanate
P044	60-51-5	Dimethoate	P069	75-86-5	2-Methylacetonitrile
P046	122-09-8	alpha,alpha-Dimethylphenethylamine	P071	298-00-0	Methyl parathion
P191	644-64-4	Dimetilan.	P190	1129-41-5	Metolcarb.
P047	(1)534-52-1	4,6-Dinitro-o-cresol, and salts	P128	315-8-4	Mexacarbate.
P048	51-28-5	2,4-Dinitrophenol	P072	86-88-4	alpha-Naphthylthiourea
P020	88-85-7	Dinoseb	P073	13463-39-3	Nickel carbonyl
P085	152-16-9	Diphosphoramidate, octamethyl-	P073	13463-39-3	Nickel carbonyl Ni(CO)4, (T-4)-
P111	107-49-3	Diphosphoric acid, tetraethyl ester	P074	557-19-7	Nickel cyanide
P039	298-04-4	Disulfoton	P074	557-19-7	Nickel cyanide Ni(CN)2
P049	541-53-7	Dithiobiuret	P075	(1)54-11-5	Nicotine, and salts
P185	26419-73-8	1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O-((methylamino)-carbonyl)oxime.	P076	10102-43-9	Nitric oxide
P050	115-29-7	Endosulfan	P077	100-01-6	p-Nitroaniline
P088	145-73-3	Endothall	P078	10102-44-0	Nitrogen dioxide
P051	72-20-8	Endrin	P076	10102-43-9	Nitrogen oxide NO
P051	72-20-8	Endrin, and metabolites	P078	10102-44-0	Nitrogen oxide NO2
P042	51-43-4	Epinephrine	P081	55-63-0	Nitroglycerine (R)
P031	460-19-5	Ethanedinitrile	P082	62-75-9	N-Nitrosodimethylamine
P194	23135-22-0	Ethanimidothioic acid, 2-(dimethylamino)-N-((methylamino) carbonyl)oxy)-2-oxo-, methyl ester.	P084	4549-40-0	N-Nitrosomethylvinylamine
P066	16752-77-5	Ethanimidothioic acid, N-((methylamino)carbonyl)oxy)-, methyl ester	P085	152-16-9	Octamethylpyrophosphoramidate
P101	107-12-0	Ethyl cyanide	P087	20816-12-0	Osmium oxide OsO4, (T-4)-
			P087	20816-12-0	Osmium tetroxide
			P088	145-73-3	7-Oxabicyclo(2.2.1)heptane-2,3-dicarboxylic acid
			P194	23135-22-0	Oxamyl.
			P089	56-38-2	Parathion
			P034	131-89-5	Phenol, 2-cyclohexyl-4,6-dinitro-
			P048	51-28-5	Phenol, 2,4-dinitro-
			P047	(1)534-52-1	Phenol, 2-methyl-4,6-dinitro-, and salts
			P020	88-85-7	Phenol, 2-(1-methylpropyl)-4,6-dinitro-
			P009	131-74-8	Phenol, 2,4,6-trinitro-, ammonium salt (R)
			P128	315-18-4	Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate (ester).
			P199	2032-65-7	Phenol, (3,5-dimethyl-4-(methylthio)-, methylcarbamate
			P202	64-00-6	Phenol, 3-(1-methylethyl)-, methyl carbamate.
			P201	2631-37-0	Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate.
			P092	62-38-4	Phenylmercury acetate
			P093	103-85-5	Phenylthiourea
			P094	298-02-2	Phorate

P095	75-44-5	Phosgene	P205	137-30-4	Zinc, bis(dimethylcarbamodithioato-S,S')-
P096	7803-51-2	Phosphine	P121	557-21-1	Zinc cyanide
P041	311-45-5	Phosphoric acid, diethyl 4-nitrophenyl ester	P121	557-21-1	Zinc cyanide Zn(CN) ₂
P039	298-04-4	Phosphorodithioic acid, 0,0-diethyl S-(2-(ethylthio)ethyl) ester	P122	1314-84-7	Zinc phosphide Zn ₃ P ₂ , when present at concentrations greater than 10% (R,T)
P094	298-02-2	Phosphorodithioic acid, 0,0-diethyl S-((ethylthio)methyl) ester	P205	137-30-4	Ziram.
P044	60-51-5	Phosphorodithioic acid, 0,0-dimethyl S-(2-(methylamino)-2-oxoethyl) ester	P001	(1)81-81-2	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, and salts, when present at concentrations greater than 0.3%
P043	55-91-4	Phosphorofluoridic acid, bis(1-methylethyl) ester	P001	(1)81-81-2	Warfarin, and salts, when present at concentrations greater than 0.3%
P089	56-38-2	Phosphorothioic acid, 0,0-diethyl 0-(4-nitrophenyl) ester	P002	591-08-2	Acetamide, -(aminothioxomethyl)-
P040	297-97-2	Phosphorothioic acid, 0,0-diethyl 0-pyrazinyl ester	P002	591-08-2	1-Acetyl-2-thiourea
P097	52-85-7	Phosphorothioic acid, 0-(4-((dimethylamino)sulfonyl)phenyl) 0,0-dimethyl ester	P003	107-02-8	Acrolein
P071	298-00-0	Phosphorothioic acid, 0,0-dimethyl 0-(4-nitrophenyl) ester	P003	107-02-8	2-Propenal
P204	57-47-6	Physostigmine.	P004	309-00-2	Aldrin
P188	57-64-7	Physostigmine salicylate.	P004	309-00-2	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexa-chloro-1,4,4a,5,8,8a,- hexahydro-, (1alpha, 4alpha, 4beta, 5alpha, 8alpha,8beta)-
P110	78-00-2	Plumbane, tetraethyl-	P005	107-18-6	Allyl alcohol
P098	151-50-8	Potassium cyanide	P005	107-18-6	2-Propen-1-ol
P098	151-50-8	Potassium cyanide K(CN)	P006	20859-73-8	Aluminum phosphide (R,T)
P099	506-61-6	Potassium silver cyanide	P007	2763-96-4	5-(Aminomethyl)-3-isoxazolol
P201	2631-37-0	Promecarb	P007	2763-96-4	3(2H)-Isoxazolone, 5-(aminomethyl)-
P070	116-06-3	Propanal, 2-methyl-2-(methylthio)-, 0-((methylamino)carbonyl)oxime	P008	504-24-5	4-Aminopyridine
P203	1646-88-4	Propanal, 2-methyl-2-(methylsulfonyl)-, 0-((methylamino)carbonyl) oxime.	P008	504-24-5	4-Pyridinamine
P101	107-12-0	Propanenitrile	P009	131-74-8	Ammonium picrate (R)
P027	542-76-7	Propanenitrile, 3-chloro-	P009	131-74-8	Phenol, 2,4,6-trinitro-, ammonium salt (R)
P069	75-86-5	Propanenitrile, 2-hydroxy-2-methyl-	P010	7778-39-4	Arsenic acid H ₃ AsO ₄
P081	55-63-0	1,2,3-Propanetriol, trinitrate (R)	P011	1303-28-2	Arsenic oxide As ₂ O ₅
P017	598-31-2	2-Propanone, 1-bromo-	P011	1303-28-2	Arsenic pentoxide
P102	107-19-7	Propargyl alcohol	P012	1327-53-3	Arsenic oxide As ₂ O ₃
P003	107-02-8	2-Propenal	P012	1327-53-3	Arsenic trioxide
P005	107-18-6	2-Propen-1-ol	P013	542-62-1	Barium cyanide
P067	75-55-8	1,2-Propylenimine	P014	108-98-5	Benzenethiol
P102	107-19-7	2-Propyn-1-ol	P014	108-98-5	Thiophenol
P008	504-24-5	4-Pyridinamine	P015	7440-41-7	Beryllium powder
P075	(1)54-11-5	Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-, and salts	P016	542-88-1	Dichloromethyl ether
P204	57-47-6	Pyrrolo(2,3-b)indol-5-ol, 1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethyl-, methylcarbamate (ester), (3aS-cis)-.	P016	542-88-1	Methane, oxybis(chloro-
P114	12039-52-0	Selenious acid, dithallium(1+) salt	P017	598-31-2	Bromoacetone
P103	630-10-4	Selenourea	P017	598-31-2	2-Propanone, 1-bromo-
P104	506-64-9	Silver cyanide	P018	357-57-3	Brucine
P104	506-64-9	Silver cyanide Ag(CN)	P018	357-57-3	Strychnidin-10-one, 2,3-dimethoxy-
P105	26628-22-8	Sodium azide	P020	88-85-7	Dinoseb
P106	143-33-9	Sodium cyanide	P020	88-85-7	Phenol, 2-(1-methylpropyl)-4,6-dinitro-
P106	143-33-9	Sodium cyanide Na(CN)	P021	592-01-8	Calcium cyanide
P108	(1)57-24-9	Strychnidin-10-one, and salts	P021	592-01-8	Calcium cyanide Ca(CN) ₂
P018	357-57-3	Strychnidin-10-one, 2,3-dimethoxy-	P022	75-15-0	Carbon disulfide
P108	(1)57-24-9	Strychnine, and salts	P023	107-20-0	Acetaldehyde, chloro-
P115	7446-18-6	Sulfuric acid, dithallium(1+) salt	P023	107-20-0	Chloroacetaldehyde
P109	3689-24-5	Tetraethylthiopyrophosphate	P024	106-47-8	Benzenamine, 4-chloro-
P110	78-00-2	Tetraethyl lead	P024	106-47-8	p-Chloroaniline
P111	107-49-3	Tetraethyl pyrophosphate	P026	5344-82-1	1-(o-Chlorophenyl)thiourea
P112	509-14-8	Tetranitromethane (R)	P026	5344-82-1	Thiourea, (2-chlorophenyl)-
P062	757-58-4	Tetraphosphoric acid, hexaethyl ester	P027	542-76-7	3-Chloropropionitrile
P113	1314-32-5	Thallic oxide	P027	542-76-7	Propanenitrile, 3-chloro-
P113	1314-32-5	Thallium oxide Tl ₂ O ₃	P028	100-44-7	Benzene, (chloromethyl)-
P114	12039-52-0	Thallium(I) selenite	P028	100-44-7	Benzyl chloride
P115	7446-18-6	Thallium(I) sulfate	P029	544-92-3	Copper cyanide
P109	3689-24-5	Thiodiphosphoric acid, tetraethyl ester	P029	544-92-3	Copper cyanide Cu(CN)
P045	39196-18-4	Thiofanox	P030		Cyanides (soluble cyanide salts), not otherwise specified
P049	541-53-7	Thioimidodicarbonic diamide ((H ₂ N)C(S)) ₂ NH	P031	460-19-5	Cyanogen
P014	108-98-5	Thiophenol	P031	460-19-5	Ethanedinitrile
P116	79-19-6	Thiosemicarbazide	P033	506-77-4	Cyanogen chloride
P026	5344-82-1	Thiourea, (2-chlorophenyl)-	P033	506-77-4	Cyanogen chloride (CN)Cl
P072	86-88-4	Thiourea, 1-naphthalenyl-	P034	131-89-5	2-Cyclohexyl-4,6-dinitrophenol
P093	103-85-5	Thiourea, phenyl-	P034	131-89-5	Phenol, 2-cyclohexyl-4,6-dinitro-
P185	26419-73-8	Tirpate.	P036	696-28-6	Arsonous dichloride, phenyl-
P123	8001-35-2	Toxaphene	P036	696-28-6	Dichlorophenylarsine
P118	75-70-7	Trichloromethanethiol	P037	60-57-1	Dieldrin
P119	7803-55-6	Vanadic acid, ammonium salt	P037	60-57-1	2,7,3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1alpha, 2beta, 2alpha, 3beta, 6beta, 6alpha, 7beta, 7alpha)-
P120	1314-62-1	Vanadium oxide V ₂ O ₅	P038	692-42-2	Arsine, diethyl-
P120	1314-62-1	Vanadium pentoxide	P038	692-42-2	Diethylarsine
P084	4549-40-0	Vinylamine, N-methyl-N-nitroso-	P039	298-04-4	Disulfoton
P001	(1)81-81-2	Warfarin, and salts, when present at concentrations greater than 0.3%	P039	298-04-4	Phosphorodithioic acid, 0,0-diethyl S-(2-(ethylthio)ethyl) ester
			P040	297-97-2	0,0-Diethyl 0-pyrazinyl phosphorothioate

P040	297-97-2	Phosphorothioic acid, 0,0-diethyl 0-pyrazinyl ester	P076	10102-43-9	Nitric oxide
P041	311-45-5	Diethyl-p-nitrophenyl phosphate	P076	10102-43-9	Nitrogen oxide NO
P041	311-45-5	Phosphoric acid, diethyl 4-nitrophenyl ester	P077	100-01-6	Benzenamine, 4-nitro-
P042	51-43-4	1,2-Benzenediol, 4-(1-hydroxy-2-(methylamino)ethyl)-, (R)-	P077	100-01-6	p-Nitroaniline
P042	51-43-4	Epinephrine	P078	10102-44-0	Nitrogen dioxide
P043	55-91-4	Diisopropylfluorophosphate (DFP)	P078	10102-44-0	Nitrogen oxide NO2
P043	55-91-4	Phosphorofluoric acid, bis(1-methylthio) ester	P081	55-63-0	Nitroglycerine (R)
P044	60-51-5	Dimethoate	P081	55-63-0	1,2,3-Propanetriol, trinitrate (R)
P044	60-51-5	Phosphorodithioic acid, 0,0-dimethyl S-(2-(methyl amino)-2-oxoethyl) ester	P082	62-75-9	Methanamine, -methyl-N-nitroso-
P045	39196-18-4	2-Butanone, 3,3-dimethyl-1-(methylthio)-, O-((methylamino)carbonyl) oxime	P082	62-75-9	N-Nitrosodimethylamine
P045	39196-18-4	Thiofanox	P084	4549-40-0	N-Nitrosomethylvinylamine
P046	122-09-8	Benzeneethanamine, alpha,alpha-dimethyl-	P084	4549-40-0	Vinylamine, -methyl-N-nitroso-
P046	122-09-8	alpha,alpha-Dimethylphenethylamine	P085	152-16-9	Diphosphoramidate, octamethyl-
P047	(1)534-52-1	4,6-Dinitro-o-cresol, and salts	P085	152-16-9	Octamethylpyrophosphoramidate
P047	(1)534-52-1	Phenol, 2-methyl-4,6-dinitro-, and salts	P087	20816-12-0	Osmium oxide OsO4, (T-4)-
P048	51-28-5	2,4-Dinitrophenol	P087	20816-12-0	Osmium tetroxide
P048	51-28-5	Phenol, 2,4-dinitro-	P088	145-73-3	Endothall
P049	541-53-7	Dithiobiuret	P088	145-73-3	7-Oxabicyclo(2.2.1)heptane-2,3-dicarboxylic acid
P049	541-53-7	Thioimidodicarbonic diamide ((H2N)C(S)2 NH	P089	56-38-2	Parathion
P050	115-29-7	Endosulfan	P089	56-38-2	Phosphorothioic acid, 0,0-diethyl 0-(4-nitrophenyl) ester
P050	115-29-7	6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide	P092	62-38-4	Mercury, (acetato-0)phenyl-
P051	(1)72-20-8	2,7:3,6-Dimethanonaphth (2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1alpha, 2beta,2beta, 3alpha, 6alpha, 6beta,7beta, 7alpha)-, and metabolites	P092	62-38-4	Phenylmercury acetate
P051	72-20-8	Endrin	P093	103-85-5	Phenylthiourea
P051	72-20-8	Endrin, and metabolites	P093	103-85-5	Thiourea, phenyl-
P054	151-56-4	Aziridine	P094	298-02-2	Phorate
P054	151-56-4	Ethyleneimine	P094	298-02-2	Phosphorodithioic acid, 0,0-diethyl S-((ethylthio)methyl) ester
P056	7782-41-4	Fluorine	P095	75-44-5	Carbonic dichloride
P057	640-19-7	Acetamide, 2-fluoro-	P095	75-44-5	Phosgene
P057	640-19-7	Fluoroacetamide	P096	7803-51-2	Hydrogen phosphide
P058	62-74-8	Acetic acid, fluoro-, sodium salt	P096	7803-51-2	Phosphine
P058	62-74-8	Fluoroacetic acid, sodium salt	P097	52-85-7	Famphur
P059	76-44-8	Heptachlor	P097	52-85-7	Phosphorothioic acid, 0-(4-((dimethylamino)sulfonyl)phenyl) 0,0-dimethyl ester
P059	76-44-8	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexa-chloro-1,4,4a,5,8,8a-hexahydro-, (1alpha, 4alpha,4beta,5beta, 8beta,8beta)-	P098	151-50-8	Potassium cyanide
P060	465-73-6	Isodrin	P098	151-50-8	Potassium cyanide K(CN)
P060	465-73-6	Hexaethyl tetraphosphate	P099	506-61-6	Argentate(1-), bis(cyano-C)-, potassium
P062	757-58-4	Tetraphosphoric acid, hexaethyl ester	P099	506-61-6	Potassium silver cyanide
P063	74-90-8	Hydrocyanic acid	P101	107-12-0	Ethyl cyanide
P063	74-90-8	Hydrogen cyanide	P101	107-12-0	Propanenitrile
P064	624-83-9	Methane, isocyanato-	P102	107-19-7	Propargyl alcohol
P064	624-83-9	Methyl isocyanate	P102	107-19-7	2-Propyn-1-ol
P065	628-86-4	Fulminic acid, mercury(2+) salt (R,T)	P103	630-10-4	Selenourea
P065	628-86-4	Mercury fulminate (R,T)	P104	506-64-9	Silver cyanide
P066	16752-77-5	Ethanimidothioic acid, N-((methylamino)carbonyl)oxy)-, methyl ester	P104	506-64-9	Silver cyanide Ag(CN)
P066	16752-77-5	Methomyl	P105	26628-22-8	Sodium azide
P067	75-55-8	Aziridine, 2-methyl-	P106	143-33-9	Sodium cyanide
P067	75-55-8	1,2-Propylenimine	P106	143-33-9	Sodium cyanide Na(CN)
P068	60-34-4	Hydrazine, methyl-	P108	(1)157-24-9	Strychnidin-10-one, and salts
P068	60-34-4	Methyl hydrazine	P108	(1)157-24-9	Strychnine, and salts
P069	75-86-5	2-Methylactonitrile	P109	3689-24-5	Tetraethyldithiopyrophosphate
P069	75-86-5	Propanenitrile, 2-hydroxy-2-methyl-	P109	3689-24-5	Thiodiphosphoric acid, tetraethyl ester
P070	116-06-3	Aldicarb	P110	78-00-2	Plumbane, tetraethyl-
P070	116-06-3	Propanal, 2-methyl-2-(methylthio)-, O-((methylamino)carbonyl)oxime	P110	78-00-2	Tetraethyl lead
P071	298-00-0	Methyl parathion	P111	107-49-3	Diphosphoric acid, tetraethyl ester
P071	298-00-0	Phosphorothioic acid, 0,0,-dimethyl 0-(4-nitrophenyl) ester	P111	107-49-3	Tetraethyl pyrophosphate
P072	86-88-4	alpha-Naphthylthiourea	P112	509-14-8	Methane, tetranitro-(R)
P072	86-88-4	Thiourea, 1-naphthalenyl-	P112	509-14-8	Tetranitromethane (R)
P073	13463-39-3	Nickel carbonyl	P113	1314-32-5	Thallic oxide
P073	13463-39-3	Nickel carbonyl Ni(CO)4, (T-4)-	P113	1314-32-5	Thallium oxide Tl2 O3
P074	557-19-7	Nickel cyanide	P114	12039-52-0	Selenious acid, dithallium(1+) salt
P074	557-19-7	Nickel cyanide Ni(CN)2	P114	12039-52-0	Tetraethyldithiopyrophosphate
P075	(1)54-11-5	Nicotine, and salts	P115	7446-18-6	Thiodiphosphoric acid, tetraethyl ester
P075	(1)54-11-5	Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, S)-, and salts	P115	7446-18-6	Plumbane, tetraethyl-
			P116	79-19-6	Tetraethyl lead
			P116	79-19-6	Thiosemicarbazide
			P118	75-70-7	Methanethiol, trichloro-
			P118	75-70-7	Trichloromethanethiol
			P119	7803-55-6	Ammonium vanadate
			P119	7803-55-6	Vanadic acid, ammonium salt
			P120	1314-62-1	Vanadium oxide V2O5
			P120	1314-62-1	Vanadium pentoxide
			P121	557-21-1	Zinc cyanide
			P121	557-21-1	Zinc cyanide Zn(CN)2
			P122	1314-84-7	Zinc phosphide Zn3 P2, when present at concentrations greater than 10% (R,T)
			P123	8001-35-2	Toxaphene
			P127	1563-66-2	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbamate.
			P127	1563-66-2	Carbofuran
			P128	315-8-4	Mexacarbate
			P128	315-18-4	Phenol, 4-(dimethylamino)-3,5-

P185	26419-73-8	dimethyl-, methylcarbamate (ester) 1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O-((methylamino)-carbonyl)oxime.	U394 U001 U034 U187 U005 U240	30558-43-1 75-07-0 75-87-6 62-44-2 53-96-3 (1)94-75-7	A2213. Acetaldehyde (I) Acetaldehyde, trichloro- Acetamide, N-(4-ethoxyphenyl)- Acetamide, N-9H-fluorene-2-yl- Acetic acid, (2,4-dichlorophenoxy)-, salts and esters
P185	26419-73-8	Tirpate	U112	141-78-6	Acetic acid ethyl ester (I)
P188	57-64-7	Benzoic acid, 2-hydroxy-, compd. with (3aS-cis)-1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethylpyrrolo(2,3-b)indol-5-yl methylcarbamate ester (1:1)	U144 U214	301-04-2 563-68-8	Acetic acid, lead(2+) salt Acetic acid, thallium(1+) salt
P188	57-64-7	Physostigmine salicylate	see F027	93-76-5	Acetic acid, (2,4,5-trichlorophenoxy)-
P189	55285-14-8	Carbamic acid, ((dibutylamino)-thio)methyl-, 2,3-dihydro-2,2-dimethyl-7-benzofuranyl ester	U002 U003 U004	67-64-1 75-05-8 98-86-2	Acetone (I) Acetonitrile (I,T) Acetophenone
P189	55285-14-8	Carbosulfan	U005	53-96-3	2-Acetylaminofluorene
P190	1129-41-5	Carbamic acid, methyl-, 3-methylphenyl ester	U006	75-36-5	Acetyl chloride (C,R,T)
P190	1129-41-5	Metolcarb	U007	79-06-1	Acrylamide
P191	644-64-4	Carbamic acid, dimethyl-, 1-((dimethyl-amino)carbonyl)-5-methyl-1H-pyrazol-3-yl ester	U008 U009 U011	79-10-7 107-13-1 61-82-5	Acrylic acid (I) Acrylonitrile Amitrole
P191	644-64-4	Dimetilan	U012	62-53-3	Aniline (I,T)
P192	119-38-0	Carbamic acid, dimethyl-, 3-methyl-1-(1-methylethyl)-1H-pyrazol-5-yl ester	U136	75-60-5	Arsinic acid, dimethyl-
P192	119-38-0	Isolan	U014	492-80-8	Auramine
P194	23135-22-0	Ethanimidthioic acid, 2-((dimethylamino)-N-((methylamino)carbonyl)oxy)-2-oxo-, methyl ester	U015 U010	115-02-6 50-07-7	Azaserine Azirino(2',3':3,4)pyrrolo(1,2-a)indole-4,7-dione, 6-amino-8-(((aminocarbonyl)oxy) methyl)-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-methyl-, (1aS-(1aalpha,8beta,8alpha,8balph))-
P194	23135-22-0	Oxamyl	U280	101-27-9	Barban.
P196	15339-36-3	Manganese, bis(dimethylcarbamodithioato-S,S')-,	U278	22781-23-3	Bendiocarb.
P196	15339-36-3	Manganese dimethylthiocarbamate	U364	22961-82-6	Bendiocarb phenol.
P197	17702-57-7	Formparanate	U271	17804-35-2	Benomyl.
P197	17702-57-7	Methanimidamide, N,N-dimethyl-N'-(2-methyl-4-((methylamino)carbonyl)oxy)phenyl)-	U157	56-49-5	Benz(j)aceanthrylene, 1,2-dihydro-3-methyl-
P198	23422-53-9	Formetanate hydrochloride	U016	225-51-4	Benz(c)acridine
P198	23422-53-9	Methanimidamide, N,N-dimethyl-N'-(3-((methylamino)carbonyl)oxy)phenyl)-monohydrochloride	U017 U192	98-87-3 23950-58-5	Benzal chloride Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-
P199	2032-65-7	Methiocarb	U018	56-55-3	Benz(a)anthracene
P199	2032-65-7	Phenol, (3,5-dimethyl-4-(methylthio)-, methylcarbamate	U094 U012	57-97-6 62-53-3	Benz(a)anthracene, 7,12-dimethyl- Benzenamine (I,T)
P201	2631-37-0	Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate	U014	492-80-8	Benzenamine, 4,4'-carbonimidoylbis(N,N-dimethyl-)
P201	2631-37-0	Promecarb	U049	3165-93-3	Benzenamine, 4-chloro-2-methyl-, hydrochloride
P202	64-00-6	m-Cumanyl methylcarbamate	U093	60-11-7	Benzenamine, N,N-dimethyl-4-(phenylazo)-
P202	64-00-6	3-Isopropylphenyl N-methylcarbamate	U328	95-53-4	Benzenamine, 2-methyl-
P202	64-00-6	Phenol, 3-(1-methylethyl)-, methyl carbamate	U353	106-49-0	Benzenamine, 4-methyl-
P203	1646-88-4	Aldicarb sulfone	U158	101-14-4	Benzenamine, 4,4'-methylenebis(2-chloro-
P203	1646-88-4	Propanal, 2-methyl-2-(methyl-sulfonyl)-, O-((methylamino)carbonyl)oxime	U222	636-21-5	Benzenamine, 2-methyl-, hydrochloride
P204	57-47-6	Physostigmine	U181	99-55-8	Benzenamine, 2-methyl-5-nitro-
P204	57-47-6	Pyrrolo(2,3-b)indol-5-ol, 1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethyl-, methylcarbamate (ester), (3aS-cis)-	U019 U038	71-43-2 510-15-6	Benzene (I,T) Benzeneacetic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy-, ethyl ester
P205	137-30-4	Zinc, bis(dimethylcarbamodithioato-S,S')-,	U030	101-55-3	Benzene, 1-bromo-4-phenoxy-
P205	137-30-4	Ziram	U035	305-03-3	Benzenbutanoic acid, 4-(bis(2-chloroethyl)amino)-
P999		Nerve, Military, and Chemical Agents (i.e., CX, GA, GB, GD, H, HD, HL, HN-1, HN-2, HN-3, HT, L, T, and VX.)	U037 U221 U028	108-90-7 25376-45-8 117-81-7	Benzene, chloro- Benzenediamine, ar-methyl- 1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester

Note (1) CAS Number given for parent compound only.

(f) The commercial chemical products, manufacturing chemical intermediates, or off-specification commercial chemical products referred to in Subsections R315-261-33(a) through (d), are identified as toxic wastes (T), unless otherwise designated. For the convenience of the regulated community, the primary hazardous properties of these materials have been indicated by the letters T (Toxicity), R (Reactivity), I (Ignitability) and C (Corrosivity). Absence of a letter indicates that the compound is only listed for toxicity. Wastes are first listed in alphabetical order by substance and then listed again in numerical order by Hazardous Waste Number. These wastes and their corresponding EPA Hazardous Waste Numbers are:

Hazardous waste No.	Chemical abstracts No.	Substance
		U069
		U088
		U102
		U107
		U070
		U071
		U072
		U060
		U017
		U223
		U239
		U201
		U127
		U056
		U220
		U105
		U106
		U055

84-74-2	1,2-Benzenedicarboxylic acid, dibutyl ester
84-66-2	1,2-Benzenedicarboxylic acid, diethyl ester
131-11-3	1,2-Benzenedicarboxylic acid, dimethyl ester
117-84-0	1,2-Benzenedicarboxylic acid, dioctyl ester
95-50-1	Benzene, 1,2-dichloro-
541-73-1	Benzene, 1,3-dichloro-
106-46-7	Benzene, 1,4-dichloro-
72-54-8	Benzene, 1,1'-(2,2-dichloroethylidene) bis(4-chloro-
98-87-3	Benzene, (dichloromethyl)-
26471-62-5	Benzene, 1,3-diisocyanatomethyl- (R,T)
1330-20-7	Benzene, dimethyl- (I)
108-46-3	1,3-Benzenediol
118-74-1	Benzene, hexachloro-
110-82-7	Benzene, hexahydro- (I)
108-88-3	Benzene, methyl-
121-14-2	Benzene, 1-methyl-2,4-dinitro-
606-20-2	Benzene, 2-methyl-1,3-dinitro-
98-82-8	Benzene, (1-methylethyl)- (I)

U169	98-95-3	Benzene, nitro-	U033	353-50-4	Carbon oxyfluoride (R,T)
U183	608-93-5	Benzene, pentachloro-	U211	56-23-5	Carbon tetrachloride
U185	82-68-8	Benzene, pentachloronitro-	U034	75-87-6	Chloral
U020	98-09-9	Benzenesulfonic acid chloride (C,R)	U035	305-03-3	Chlorambucil
U020	98-09-9	Benzenesulfonyl chloride (C,R)	U036	57-74-9	Chlordane, alpha and gamma isomers
U207	95-94-3	Benzene, 1,2,4,5-tetrachloro-	U026	494-03-1	Chlornaphazin
U061	50-29-3	Benzene, 1,1'-(2,2,2-trichloroethylidene) bis(4-chloro-	U037	108-90-7	Chlorobenzene
U247	72-43-5	Benzene, 1,1'-(2,2,2-trichloroethylidene) bis(4-methoxy-	U038	510-15-6	Chlorobenzilate
U023	98-07-7	Benzene, (trichloromethyl)-	U039	59-50-7	p-Chloro-m-cresol
U234	99-35-4	Benzene, 1,3,5-trinitro-	U042	110-75-8	2-Chloroethyl vinyl ether
U021	92-87-5	Benzidine	U044	67-66-3	Chloroform
U278	22781-23-3	1,3-Benzodioxol-4-ol, 2,2-dimethyl-, methyl carbamate.	U046	107-30-2	Chloromethyl methyl ether
U364	22961-82-6	1,3-Benzodioxol-4-ol, 2,2-dimethyl-,	U047	91-58-7	beta-Chloronaphthalene
U203	94-59-7	1,3-Benzodioxole, 5-(2-propenyl)-	U048	95-57-8	o-Chlorophenol
U141	120-58-1	1,3-Benzodioxole, 5-(1-propenyl)-	U049	3165-93-3	4-Chloro-o-toluidine, hydrochloride
U367	1563-38-8	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-	U032	13765-19-0	Chromic acid H2 CrO4, calcium salt
U090	94-58-6	1,3-Benzodioxole, 5-propyl-	U050	218-01-9	Chrysene
U064	189-55-9	Benzo(rst)pentaphene	U051		Cresote
U248	(1)81-81-2	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenyl-butyl)-, and salts, when present at concentrations of 0.3% or less	U052	1319-77-3	Cresol (Cresylic acid)
U022	50-32-8	Benzo(a)pyrene	U053	4170-30-3	Crotonaldehyde
U197	106-51-4	p-Benzoquinone	U055	98-82-8	Cumene (I)
U023	98-07-7	Benzotrithloride (C,R,T)	U246	506-68-3	Cyanogen bromide (CN)Br
U085	1464-53-5	2,2'-Bioxirane	U197	106-51-4	2,5-Cyclohexadiene-1,4-dione
U021	92-87-5	(1,1'-Biphenyl)-4,4'-diamine	U056	110-82-7	Cyclohexane (I)
U073	91-94-1	(1,1'-Biphenyl)-4,4'-diamine, 3,3'-dichloro-	U129	58-89-9	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)-
U091	119-90-4	(1,1'-Biphenyl)-4,4'-diamine, 3,3'-dimethoxy-	U057	108-94-1	Cyclohexanone (I)
U095	119-93-7	(1,1'-Biphenyl)-4,4'-diamine, 3,3'-dimethyl-	U130	77-47-4	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-
U225	75-25-2	Bromoform	U058	50-18-0	Cyclophosphamide
U030	101-55-3	4-Bromophenyl phenyl ether	U240	(1)94-75-7	2,4-D, salts and esters
U128	87-68-3	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	U059	20830-81-3	Daunomycin
U172	924-16-3	1-Butanamine, N-butyl-N-nitroso-	U060	72-54-8	DDD
U031	71-36-3	1-Butanol (I)	U061	50-29-3	DDT
U159	78-93-3	2-Butanone (I,T)	U062	2303-16-4	Diallate
U160	1338-23-4	2-Butanone, peroxide (R,T)	U063	53-70-3	Dibenz(a,h)anthracene
U053	4170-30-3	2-Butenal	U064	189-55-9	Dibenzo(a,i)pyrene
U074	764-41-0	2-Butene, 1,4-dichloro- (I,T)	U066	96-12-8	1,2-Dibromo-3-chloropropane
U143	303-34-4	2-Butenoic acid, 2-methyl-, 7-((2,3-dihydroxy-2-(1-methoxyethyl)-3-methyl-1-oxobutoxy)methyl)- 2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl ester, (1S- (1alpha(Z),7(2S*,3R*),7alpha))-n-Butyl alcohol (I)	U069	84-74-2	Dibutyl phthalate
U031	71-36-3	n-Butyl alcohol (I)	U070	95-50-1	o-Dichlorobenzene
U136	75-60-5	Cacodylic acid	U071	541-73-1	m-Dichlorobenzene
U032	13765-19-0	Calcium chromate	U072	106-46-7	p-Dichlorobenzene
U372	10605-21-7	Carbamic acid, 1H-benzimidazol-2-yl, methyl ester.	U073	91-94-1	3,3'-Dichlorobenzidine
U271	17804-35-2	Carbamic acid, (1-(butylamino)carbonyl)-1H-benzimidazol-2-yl)-, methyl ester.	U074	764-41-0	1,4-Dichloro-2-butene (I,T)
U280	101-27-9	Carbamic acid, (3-chlorophenyl)-, 4-chloro-2-butynyl ester.	U075	75-71-8	Dichlorodifluoromethane
U238	51-79-6	Carbamic acid, ethyl ester	U078	75-35-4	1,1-Dichloroethylene
U178	615-53-2	Carbamic acid, methylnitroso-, ethyl ester	U079	156-60-5	1,2-Dichloroethylene
U373	122-42-9	Carbamic acid, phenyl-, 1-methylethyl ester.	U025	111-44-4	Dichloroethyl ether
U409	23564-05-8	Carbamic acid, (1,2-phenylenebis(iminocarbonothioyl))bis-, dimethyl ester.	U027	108-60-1	Dichloroisopropyl ether
U097	79-44-7	Carbamic chloride, dimethyl-	U024	111-91-1	Dichloromethoxy ethane
U389	2303-17-5	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3,3-trichloro-2-propenyl) ester.	U081	120-83-2	2,4-Dichlorophenol
U387	52888-80-9	Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester.	U082	87-65-0	2,6-Dichlorophenol
U114	(1)111-54-6	Carbamodithioic acid, 1,2-ethanedylbis-, salts and esters	U084	542-75-6	1,3-Dichloropropene
U062	2303-16-4	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester	U085	1464-53-5	1,2,3,4-Diepoxybutane (I,T)
U279	63-25-2	Carbaryl.	U108	123-91-1	1,4-Diethyleneoxide
U372	10605-21-7	Carbendazim.	U028	117-81-7	Diethylhexyl phthalate
U367	1563-38-8	Carbofuran phenol.	U395	5952-26-1	Diethylene glycol, dicarbamate.
U215	6533-73-9	Carbonic acid, dithallium(1+) salt	U086	1615-80-1	N,N'-Diethylhydrazine
U033	353-50-4	Carbonic difluoride	U087	3288-58-2	O,O-Diethyl S-methyl dithiophosphate
U156	79-22-1	Carbonochloridic acid, methyl ester (I,T)	U088	84-66-2	Diethyl phthalate
			U089	56-53-1	Diethylstilbesterol
			U090	94-58-6	Dihydrosafrole
			U091	119-90-4	3,3'-Dimethoxybenzidine
			U092	124-40-3	Dimethylamine (I)
			U093	60-11-7	p-Dimethylaminoazobenzene
			U094	57-97-6	7,12-Dimethylbenz(a)anthracene
			U095	119-93-7	3,3'-Dimethylbenzidine
			U096	80-15-9	alpha,alpha-Dimethylbenzylhydroperoxide (R)
			U097	79-44-7	Dimethylcarbamoyle chloride
			U098	57-14-7	1,1-Dimethylhydrazine
			U099	540-73-8	1,2-Dimethylhydrazine
			U101	105-67-9	2,4-Dimethylphenol
			U102	131-11-3	Dimethyl phthalate
			U103	77-78-1	Dimethyl sulfate
			U105	121-14-2	2,4-Dinitrotoluene
			U106	606-20-2	2,6-Dinitrotoluene
			U107	117-84-0	Di-n-octyl phthalate
			U108	123-91-1	1,4-Dioxane
			U109	122-66-7	1,2-Diphenylhydrazine
			U110	142-84-7	Dipropylamine (I)
			U111	621-64-7	Di-n-propylnitrosamine
			U041	106-89-8	Epichlorohydrin
			U001	75-07-0	Ethanal (I)
			U404	121-44-8	Ethanamine, N,N-diethyl-
			U174	55-18-5	Ethanamine, N-ethyl-N-nitroso-
			U155	91-80-5	1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)-

U067	106-93-4	Ethane, 1,2-dibromo-	U129	58-89-9	Lindane
U076	75-34-3	Ethane, 1,1-dichloro-	U163	70-25-7	MNNG
U077	107-06-2	Ethane, 1,2-dichloro-	U147	108-31-6	Maleic anhydride
U131	67-72-1	Ethane, hexachloro-	U148	123-33-1	Maleic hydrazide
U024	111-91-1	Ethane, 1,1'-(methylenebis(oxy))bis(2-chloro-	U149	109-77-3	Malononitrile
U117	60-29-7	Ethane, 1,1'-oxybis-(I)	U150	148-82-3	Melphalan
U025	111-44-4	Ethane, 1,1'-oxybis(2-chloro-	U151	7439-97-6	Mercury
U184	76-01-7	Ethane, pentachloro-	U152	126-98-7	Methacrylonitrile (I, T)
U208	630-20-6	Ethane, 1,1,1,2-tetrachloro-	U092	124-40-3	Methanamine, N-methyl- (I)
U209	79-34-5	Ethane, 1,1,2,2-tetrachloro-	U029	74-83-9	Methane, bromo-
U218	62-55-5	Ethanethioamide	U045	74-87-3	Methane, chloro- (I, T)
U226	71-55-6	Ethane, 1,1,1-trichloro-	U046	107-30-2	Methane, chloromethoxy-
U227	79-00-5	Ethane, 1,1,2-trichloro-	U068	74-95-3	Methane, dibromo-
U410	59669-26-0	Ethanimidothioic acid, N,N'-(thiobis(methylimino)carbonyloxy))bis-, dimethyl ester	U080	75-09-2	Methane, dichloro-
U394	30558-43-1	Ethanimidothioic acid, 2-(dimethylamino)-N-hydroxy-2-oxo-, methyl ester.	U075	75-71-8	Methane, dichlorodifluoro-
U359	110-80-5	Ethanol, 2-ethoxy-	U138	74-88-4	Methane, iodo-
U173	1116-54-7	Ethanol, 2,2'-(nitrosoimino)bis-	U119	62-50-0	Methanesulfonic acid, ethyl ester
U395	5952-26-1	Ethanol, 2,2'-oxybis-, dicarbamate.	U211	56-23-5	Methane, tetrachloro-
U004	98-86-2	Ethanone, 1-phenyl-	U153	74-93-1	Methanethiol (I, T)
U043	75-01-4	Ethene, chloro-	U225	75-25-2	Methane, tribromo-
U042	110-75-8	Ethene, (2-chloroethoxy)-	U044	67-66-3	Methane, trichloro-
U078	75-35-4	Ethene, 1,1-dichloro-	U121	75-69-4	Methane, trichlorofluoro-
U079	156-60-5	Ethene, 1,2-dichloro-, (E)-	U036	57-74-9	4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-
U210	127-18-4	Ethene, tetrachloro-	U154	67-56-1	Methanol (I)
U228	79-01-6	Ethene, trichloro-	U155	91-80-5	Methapyriene
U112	141-78-6	Ethyl acetate (I)	U142	143-50-0	1,3,4-Metheno-2H-cyclobuta(cd)pentalen-2-one, 1,1a,3,3a,4,5,5a,5b,6-decachlorooctahydro-
U113	140-88-5	Ethyl acrylate (I)	U247	72-43-5	Methoxychlor
U238	51-79-6	Ethyl carbamate (urethane)	U154	67-56-1	Methyl alcohol (I)
U117	60-29-7	Ethyl ether (I)	U029	74-83-9	Methyl bromide
U114	(1)111-54-6	Ethylenebisdithiocarbamic acid, salts and esters	U186	504-60-9	1-Methylbutadiene (I)
U067	106-93-4	Ethylene dibromide	U045	74-87-3	Methyl chloride (I,T)
U077	107-06-2	Ethylene dichloride	U156	79-22-1	Methyl chlorocarbonate (I,T)
U359	110-80-5	Ethylene glycol monoethyl ether	U226	71-55-6	Methyl chloroform
U115	75-21-8	Ethylene oxide (I,T)	U157	56-49-5	3-Methylcholanthrene
U116	96-45-7	Ethylenethiourea	U158	101-14-4	4,4'-Methylenebis(2-chloroaniline)
U076	75-34-3	Ethylidene dichloride	U068	74-95-3	Methylene bromide
U118	97-63-2	Ethyl methacrylate	U080	75-09-2	Methylene chloride
U119	62-50-0	Ethyl methanesulfonate	U159	78-93-3	Methyl ethyl ketone (MEK) (I,T)
U120	206-44-0	Fluoranthene	U160	1338-23-4	Methyl ethyl ketone peroxide (R,T)
U122	50-00-0	Formaldehyde	U138	74-88-4	Methyl iodide
U123	64-18-6	Formic acid (C,T)	U161	108-10-1	Methyl isobutyl ketone (I)
U124	110-00-9	Furan (I)	U162	80-62-6	Methyl methacrylate (I,T)
U125	98-01-1	2-Furancarboxaldehyde (I)	U161	108-10-1	4-Methyl-2-pentanone (I)
U147	108-31-6	2,5-Furandione	U164	56-04-2	Methylthiouracil
U213	109-99-9	Furan, tetrahydro-(I)	U010	50-07-7	Mitomycin C
U125	98-01-1	Furfural (I)	U059	20830-81-3	5,12-Naphthacenedione, 8-acetyl-10-((3-amino-2,3,6-trideoxy)-alpha-L-lyxo-hexopyranosyl)oxy)-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-, (8S-cis)-
U124	110-00-9	Furfuran (I)	U167	134-32-7	1-Naphthalenamine
U206	18883-66-4	Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-, D-	U168	91-59-8	2-Naphthalenamine
U206	18883-66-4	D-Glucose, 2-deoxy-2-(((methylnitrosoamino)-carbonyl)amino)-	U026	494-03-1	Naphthalenamine, N,N'-bis(2-chloroethyl)-
U126	765-34-4	Glycidylaldehyde	U165	91-20-3	Naphthalene
U163	70-25-7	Guanidine, N-methyl-N'-nitro-N-nitroso-	U047	91-58-7	Naphthalene, 2-chloro-
U127	118-74-1	Hexachlorobenzene	U166	130-15-4	1,4-Naphthalenedione
U128	87-68-3	Hexachlorobutadiene	U236	72-57-1	2,7-Naphthalenedisulfonic acid, 3,3'-((3,3'- dimethyl(1,1'-biphenyl)-4,4'-diyl)bis(azo)bis(5-amino-4-hydroxy)-, tetrasodium salt
U130	77-47-4	Hexachlorocyclopentadiene	U279	63-25-2	1-Naphthalenol, methylcarbamate.
U131	67-72-1	Hexachloroethane	U166	130-15-4	1,4-Naphthoquinone
U132	70-30-4	Hexachlorophene	U167	134-32-7	alpha-Naphthylamine
U243	1888-71-7	Hexachloropropene	U168	91-59-8	beta-Naphthylamine
U133	302-01-2	Hydrazine (R,T)	U217	10102-45-1	Nitric acid, thallium(1+) salt
U086	1615-80-1	Hydrazine, 1,2-diethyl-	U169	98-95-3	Nitrobenzene (I,T)
U098	57-14-7	Hydrazine, 1,1-dimethyl-	U170	100-02-7	p-Nitrophenol
U099	540-73-8	Hydrazine, 1,2-dimethyl-	U171	79-46-9	2-Nitropropane (I,T)
U109	122-66-7	Hydrazine, 1,2-diphenyl-	U172	924-16-3	N-Nitrosodi-n-butylamine
U134	7664-39-3	Hydrofluoric acid (C,T)	U173	1116-54-7	N-Nitrosodiethanolamine
U134	7664-39-3	Hydrogen fluoride (C,T)	U174	55-18-5	N-Nitrosodiethylamine
U135	7783-06-4	Hydrogen sulfide	U176	759-73-9	N-Nitroso-N-ethylurea
U135	7783-06-4	Hydrogen sulfide H2 S	U177	684-93-5	N-Nitroso-N-methylurea
U096	80-15-9	Hydroperoxide, 1-methyl-1-phenylethyl-(R)	U178	615-53-2	N-Nitroso-N-methylurethane
U116	96-45-7	2-Imidazolidinethione	U179	100-75-4	N-Nitrosopiperidine
U137	193-39-5	Indeno(1,2,3-cd)pyrene	U180	930-55-2	N-Nitrosopyrrolidine
U190	85-44-9	1,3-Isobenzofurandione	U181	99-55-8	5-Nitro-o-toluidine
U140	78-83-1	Isobutyl alcohol (I,T)	U193	1120-71-4	1,2-Oxathiolane, 2,2-dioxide
U141	120-58-1	Isosafrole	U058	50-18-0	2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl)tetrahydro-, 2-oxide
U142	143-50-0	Kepone	U115	75-21-8	Oxirane (I,T)
U143	303-34-4	Lasiocarpine	U126	765-34-4	Oxirane-carboxaldehyde
U144	301-04-2	Lead acetate	U041	106-89-8	Oxirane, (chloromethyl)-
U146	1335-32-6	Lead, bis(acetato-0)tetrahydroxytri-			
U145	7446-27-7	Lead phosphate			
U146	1335-32-6	Lead subacetate			

U182	123-63-7	Paraldehyde	U207	95-94-3	1,2,4,5-Tetrachlorobenzene
U183	608-93-5	Pentachlorobenzene	U208	630-20-6	1,1,1,2-Tetrachloroethane
U184	76-01-7	Pentachloroethane	U209	79-34-5	1,1,2,2-Tetrachloroethane
U185	82-68-8	Pentachloronitrobenzene (PCNB)	U210	127-18-4	Tetrachloroethylene
See F027	87-86-5	Pentachlorophenol	See F027	58-90-2	2,3,4,6-Tetrachlorophenol
U161	108-10-1	Pentanol, 4-methyl-	U213	109-99-9	Tetrahydrofuran (I)
U186	504-60-9	1,3-Pentadiene (I)	U214	563-68-8	Thallium(I) acetate
U187	62-44-2	Phenacetin	U215	6533-73-9	Thallium(I) carbonate
U188	108-95-2	Phenol	U216	7791-12-0	Thallium(I) chloride
U048	95-57-8	Phenol, 2-chloro-	U216	7791-12-0	thallium chloride TICl
U039	59-50-7	Phenol, 4-chloro-3-methyl-	U217	10102-45-1	Thallium(I) nitrate
U081	120-83-2	Phenol, 2,4-dichloro-	U218	62-55-5	Thioacetamide
U082	87-65-0	Phenol, 2,6-dichloro-	U410	59669-26-0	Thiodicarb.
U089	56-53-1	Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-, (E)-	U153	74-93-1	Thiomethanol (I,T)
U101	105-67-9	Phenol, 2,4-dimethyl-	U244	137-26-8	Thioperoxydicarbonic diamide ((H2N)C(S)2 S2, tetramethyl-
U052	1319-77-3	Phenol, methyl-	U409	23564-05-8	Thiophanate-methyl.
U132	70-30-4	Phenol, 2,2'-methylenebis(3,4,6-trichloro-	U219	62-56-6	Thiourea
U411	114-26-1	Phenol, 2-(1-methylethoxy)-, methylcarbamate.	U244	137-26-8	Thiram
U170	100-02-7	Phenol, 4-nitro-	U220	108-88-3	Toluene
See F027	87-86-5	Phenol, pentachloro-	U221	25376-45-8	Toluenediamine
See F027	58-90-2	Phenol, 2,3,4,6-tetrachloro-	U223	26471-62-5	Toluene diisocyanate (R,T)
See F027	95-95-4	Phenol, 2,4,5-trichloro-	U328	95-53-4	o-Toluidine
See F027	88-06-2	Phenol, 2,4,6-trichloro-	U353	106-49-0	p-Toluidine
U150	148-82-3	L-Phenylalanine, 4-(bis(2-chloroethyl)amino)-	U222	636-21-5	o-Toluidine hydrochloride
U145	7446-27-7	Phosphoric acid, lead(2+) salt (2:3)	U389	2303-17-5	Triallate.
U087	3288-58-2	Phosphorodithioic acid, 0,0-diethyl S-methyl ester	U011	61-82-5	1H-1,2,4-Triazol-3-amine
U189	1314-80-3	Phosphorus sulfide (R)	U226	71-55-6	1,1,1-Trichloroethane
U190	85-44-9	Phthalic anhydride	U227	79-00-5	1,1,2-Trichloroethane
U191	109-06-8	2-Picoline	U228	79-01-6	Trichloroethylene
U179	100-75-4	Piperidine, 1-nitroso-	U121	75-69-4	Trichloromonofluoromethane
U192	23950-58-5	Pronamide	See F027	95-95-4	2,4,5-Trichlorophenol
U194	107-10-8	1-Propanamine (I,T)	See F027	88-06-2	2,4,6-Trichlorophenol
U111	621-64-7	1-Propanamine, N-nitroso-N-propyl-	U404	121-44-8	Triethylamine.
U110	142-84-7	1-Propanamine, N-propyl- (I)	U234	99-35-4	1,3,5-Trinitrobenzene (R,T)
U066	96-12-8	Propane, 1,2-dibromo-3-chloro-	U182	123-63-7	1,3,5-Trioxane, 2,4,6-trimethyl-
U083	78-87-5	Propane, 1,2-dichloro-	U235	126-72-7	Tris(2,3-dibromopropyl) phosphate
U149	109-77-3	Propanedinitrile	U236	72-57-1	Trypan blue
U171	79-46-9	Propane, 2-nitro- (I,T)	U237	66-75-1	Uracil shallard
U027	108-60-1	Propane, 2,2'-oxybis(2-chloro-	U176	759-73-9	Urea, N-ethyl-N-nitroso-
U193	1120-71-4	1,3-Propane sultone	U177	684-93-5	Urea, N-methyl-N-nitroso-
See F027	93-72-1	Propanoic acid, 2-(2,4,5-trichlorophenoxy)-	U043	75-01-4	Vinyl chloride
U235	126-72-7	1-Propanol, 2,3-dibromo-, phosphate (3:1)	U248	(1)81-81-2	Warfarin, and salts, when present at concentrations of 0.3% or less
U140	78-83-1	1-Propanol, 2-methyl- (I,T)	U239	1330-20-7	Xylene (I)
U002	67-64-1	2-Propanone (I)	U200	50-55-5	Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-((3,4,5-trimethoxybenzoyl) oxy)-, methyl ester, (3beta,16beta, 17alpha,18beta, 20alpha)-
U007	79-06-1	2-Propenamide	U249	1314-84-7	Zinc phosphide Zn3 P2, when present at concentrations of 10% or less
U084	542-75-6	1-Propene, 1,3-dichloro-	U001	75-07-0	Acetaldehyde (I)
U243	1888-71-7	1-Propene, 1,1,2,3,3,3-hexachloro-	U001	75-07-0	Ethanal (I)
U009	107-13-1	2-Propenenitrile	U002	67-64-1	Acetone (I)
U152	126-98-7	2-Propenenitrile, 2-methyl- (I,T)	U002	67-64-1	2-Propanone (I)
U008	79-10-7	2-Propenoic acid (I)	U003	75-05-8	Acetonitrile (I,T)
U113	140-88-5	2-Propenoic acid, ethyl ester (I)	U004	98-86-2	Acetophenone
U118	97-63-2	2-Propenoic acid, 2-methyl-, ethyl ester	U004	98-86-2	Ethanone, 1-phenyl-
U162	80-62-6	2-Propenoic acid, 2-methyl-, methyl ester (I,T)	U005	53-96-3	Acetamide, -9H-fluoren-2-yl-
U373	122-42-9	Propham.	U005	53-96-3	2-Acetylaminofluorene
U411	114-26-1	Propoxur.	U006	75-36-5	Acetyl chloride (C,R,T)
U387	52888-80-9	Prosulfocarb.	U007	79-06-1	Acrylamide
U194	107-10-8	n-Propylamine (I,T)	U007	79-06-1	2-Propenamide
U083	78-87-5	Propylene dichloride	U008	79-10-7	Acrylic acid (I)
U148	123-33-1	3,6-Pyridazinedione, 1,2-dihydro-	U008	79-10-7	2-Propenoic acid (I)
U196	110-86-1	Pyridine	U009	107-13-1	Acrylonitrile
U191	109-06-8	Pyridine, 2-methyl-	U009	107-13-1	2-Propenenitrile
U237	66-75-1	2,4-(1H,3H)-Pyrimidinedione, 5-(bis(2-chloroethyl)amino)-	U010	50-07-7	Azirino(2',3':3,4)pyrrolo(1,2-a)indole-4,7-dione, 6-amino-8-(((aminocarbonyl) oxy)methyl)-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-methyl-, (1aS-(1aalpha, 8beta, 8alpha,8beta))-
U164	56-04-2	4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-	U010	50-07-7	Mitomycin C
U180	930-55-2	Pyrrrolidine, 1-nitroso-	U011	61-82-5	Amitrole
U200	50-55-5	Reserpine	U011	61-82-5	1H-1,2,4-Triazol-3-amine
U201	108-46-3	Resorcinol	U012	62-53-3	Aniline (I,T)
U203	94-59-7	Safrole	U012	62-53-3	Benzenamine (I,T)
U204	7783-00-8	Selenious acid	U014	492-80-8	Auramine
U204	7783-00-8	Selenium dioxide	U014	492-80-8	Benzenamine, 4,4'-carbonimidoylbis(N,N-dimethyl-
U205	7488-56-4	Selenium sulfide	U015	115-02-6	Azaserine
U205	7488-56-4	Selenium sulfide SeS2 (R,T)	U015	115-02-6	L-Serine, diazoacetate (ester)
U015	115-02-6	L-Serine, diazoacetate (ester)	U016	225-51-4	Benz(c)acridine
See F027	93-72-1	Silvex (2,4,5-TP)	U017	98-87-3	Benzal chloride
U206	18883-66-4	Streptozotocin	U017	98-87-3	Benzene, (dichloromethyl)-
U103	77-78-1	Sulfuric acid, dimethyl ester	U018	56-55-3	Benz(a)anthracene
U189	1314-80-3	Sulfur phosphide (R)	U019	71-43-2	Benzene (I,T)
See F027	93-76-5	2,4,5-T			

U020	98-09-9	Benzenesulfonic acid chloride (C,R)	U060	72-54-8	DDD
U020	98-09-9	Benzenesulfonyl chloride (C,R)	U061	50-29-3	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro-
U021	92-87-5	Benzidine			DDT
U021	92-87-5	(1,1'-Biphenyl)-4,4'-diamine	U061	50-29-3	
U022	50-32-8	Benzo(a)pyrene	U062	2303-16-4	Carbamothioic acid, bis(1-methylethyl)-, S- (2,3-dichloro-2-propenyl) ester
U023	98-07-7	Benzene, (trichloromethyl)-			
U023	98-07-7	Benzotrichloride (C,R,T)			
U024	111-91-1	Dichloromethoxy ethane	U062	2303-16-4	Diallate
U024	111-91-1	Ethane, 1,1'-(methylenebis(oxy))bis(2-chloro-	U063	53-70-3	Dibenz(a,h)anthracene
			U064	189-55-9	Benzo(rst)pentaphene
U025	111-44-4	Dichloroethyl ether	U064	189-55-9	Dibenzo(a,i)pyrene
U025	111-44-4	Ethane, 1,1'-oxybis(2-chloro-	U066	96-12-8	1,2-Dibromo-3-chloropropane
U026	494-03-1	Chloromaphazin	U066	96-12-8	Propane, 1,2-dibromo-3-chloro-
U026	494-03-1	Naphthalenamine, N,N'-bis(2-chloroethyl)-	U067	106-93-4	Ethane, 1,2-dibromo-
			U067	106-93-4	Ethylene dibromide
U027	108-60-1	Dichloroisopropyl ether	U068	74-95-3	Methane, dibromo-
U027	108-60-1	Propane, 2,2'-oxybis(2-chloro-	U068	74-95-3	Methylene bromide
U028	117-81-7	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	U069	84-74-2	1,2-Benzenedicarboxylic acid, dibutyl ester
U028	117-81-7	Diethylhexyl phthalate	U069	84-74-2	Dibutyl phthalate
U029	74-83-9	Methane, bromo-	U070	95-50-1	Benzene, 1,2-dichloro-
U029	74-83-9	Methyl bromide	U070	95-50-1	o-Dichlorobenzene
U030	101-55-3	Benzene, 1-bromo-4-phenoxy-	U071	541-73-1	Benzene, 1,3-dichloro-
U030	101-55-3	4-Bromophenyl phenyl ether	U071	541-73-1	m-Dichlorobenzene
U031	71-36-3	1-Butanol (I)	U072	106-46-7	Benzene, 1,4-dichloro-
U031	71-36-3	n-Butyl alcohol (I)	U072	106-46-7	p-Dichlorobenzene
U032	13765-19-0	Calcium chromate	U073	91-94-1	(1,1'-Biphenyl)-4,4'-diamine, 3,3'-dichloro-
U032	13765-19-0	Chromic acid H2 CrO4, calcium salt			
U033	353-50-4	Carbonic difluoride	U073	91-94-1	3,3'-Dichlorobenzidine
U033	353-50-4	Carbon oxyfluoride (R,T)	U074	764-41-0	2-Butene, 1,4-dichloro-(I,T)
U034	75-87-6	Acetaldehyde, trichloro-	U074	764-41-0	1,4-Dichloro-2-butene (I,T)
U034	75-87-6	Chloral	U075	75-71-8	Dichlorodifluoromethane
U035	305-03-3	Benzenebutanoic acid, 4-(bis(2-chloroethyl)amino)-	U075	75-71-8	Methane, dichlorodifluoro-
			U076	75-34-3	Ethane, 1,1-dichloro-
U035	305-03-3	Chlorambucil	U076	75-34-3	Ethylidene dichloride
U036	57-74-9	Chlordane, alpha and gamma isomers	U077	107-06-2	Ethane, 1,2-dichloro-
U036	57-74-9	4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-	U077	107-06-2	Ethylene dichloride
			U078	75-35-4	1,1-Dichloroethylene
			U078	75-35-4	Ethene, 1,1-dichloro-
U037	108-90-7	Benzene, chloro-	U079	156-60-5	1,2-Dichloroethylene
U037	108-90-7	Chlorobenzene	U079	156-60-5	Ethene, 1,2-dichloro-, (E)-
U038	510-15-6	Benzenoacetic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy-, ethyl ester	U080	75-09-2	Methane, dichloro-
			U080	75-09-2	Methylene chloride
			U081	120-83-2	2,4-Dichlorophenol
U038	510-15-6	Chlorobenzilate	U081	120-83-2	Phenol, 2,4-dichloro-
U039	59-50-7	p-Chloro-m-cresol	U082	87-65-0	2,6-Dichlorophenol
U039	59-50-7	Phenol, 4-chloro-3-methyl-	U082	87-65-0	Phenol, 2,6-dichloro-
U041	106-89-8	Epichlorohydrin	U083	78-87-5	Propane, 1,2-dichloro-
U041	106-89-8	Oxirane, (chloromethyl)-	U083	78-87-5	Propylene dichloride
U042	110-75-8	2-Chloroethyl vinyl ether	U084	542-75-6	1,3-Dichloropropene
U042	110-75-8	Ethene, (2-chloroethoxy)-	U084	542-75-6	1-Propene, 1,3-dichloro-
U043	75-01-4	Ethene, chloro-	U085	1464-53-5	2,2'-Bioxirane
U043	75-01-4	Vinyl chloride	U085	1464-53-5	1,2:3,4-Diepoxybutane (I,T)
U044	67-66-3	Chloroform	U086	1615-80-1	N,N'-Diethylhydrazine
U044	67-66-3	Methane, trichloro-	U086	1615-80-1	Hydrazine, 1,2-diethyl-
U045	74-87-3	Methane, chloro-(I,T)	U087	3288-58-2	0,0-Diethyl S-methyl dithiophosphate
U045	74-87-3	Methyl chloride (I,T)	U087	3288-58-2	Phosphorodithioic acid, 0,0-diethyl S-methyl ester
U046	107-30-2	Chloromethyl methyl ether	U088	84-66-2	1,2-Benzenedicarboxylic acid, diethyl ester
U046	107-30-2	Methane, chloromethoxy-			
U047	91-58-7	beta-Chloronaphthalene	U088	84-66-2	Diethyl phthalate
U047	91-58-7	Naphthalene, 2-chloro-	U089	56-53-1	Diethylstilbesterol
U048	95-57-8	o-Chlorophenol	U089	56-53-1	Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-, (E)-
U048	95-57-8	Phenol, 2-chloro-			
U049	3165-93-3	Benzenamine, 4-chloro-2-methyl-, hydrochloride	U090	94-58-6	1,3-Benzodioxole, 5-propyl-
U049	3165-93-3	4-Chloro-o-toluidine, hydrochloride	U090	94-58-6	Dihydrosafrole
U050	218-01-9	Chrysene	U091	119-90-4	(1,1'-Biphenyl)-4,4'-diamine, 3,3'-dimethoxy-
U051		Cresote			
U052	1319-77-3	Cresol (Cresylic acid)	U091	119-90-4	3,3'-Dimethoxybenzidine
U052	1319-77-3	Phenol, methyl-	U092	124-40-3	Dimethylamine (I)
U053	4170-30-3	2-Butenal	U092	124-40-3	Methanamine, -methyl-(I)
U053	4170-30-3	Crotonaldehyde	U093	60-11-7	Benzenamine, N,N-dimethyl-4-(phenylazo)-
U055	98-82-8	Benzene, (1-methylethyl)-(I)			
U055	98-82-8	Cumene (I)	U093	60-11-7	p-Dimethylaminoazobenzene
U056	110-82-7	Benzene, hexahydro-(I)	U094	57-97-6	Benz(a)anthracene, 7,12-dimethyl-
U056	110-82-7	Cyclohexane (I)	U094	57-97-6	7,12-Dimethylbenz(a)anthracene
U057	108-94-1	Cyclohexanone (I)	U095	119-93-7	(1,1'-Biphenyl)-4,4'-diamine, 3,3'-dimethyl-
U058	50-18-0	Cyclophosphamide			
U058	50-18-0	2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl)tetrahydro-, 2-oxide	U095	119-93-7	3,3'-Dimethylbenzidine
			U096	80-15-9	alpha, alpha-Dimethylbenzylhydroperoxide (R)
U059	20830-81-3	Daunomycin			
U059	20830-81-3	5,12-Naphthacenedione, 8-acetyl-10-((3-amino-2,3,6-trideoxy)-alpha-L-lyxo-hexopyranosyl)oxy)-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-, (8S-cis)-	U096	80-15-9	Hydroperoxide, 1-methyl-1-phenylethyl-(R)
			U097	79-44-7	Carbamic chloride, dimethyl-
			U097	79-44-7	Dimethylcarbonyl chloride
			U098	57-14-7	1,1-Dimethylhydrazine
			U098	57-14-7	Hydrazine, 1,1-dimethyl-
			U099	540-73-8	1,2-Dimethylhydrazine
U060	72-54-8	Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro-	U099	540-73-8	Hydrazine, 1,2-dimethyl-

U101	105-67-9	2,4-Dimethylphenol			methyl-1-oxobutoxy)methyl)-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl
U101	105-67-9	Phenol, 2,4-dimethyl-			ester, (1S-(1alpha(Z),7(2S*,3R*),7aalpha))-
U102	131-11-3	1,2-Benzenedicarboxylic acid, dimethyl ester			Lasiocarpine
U102	131-11-3	Dimethyl phthalate	U143	303-34-4	Acetic acid, lead(2+) salt
U103	77-78-1	Dimethyl sulfate	U144	301-04-2	Lead acetate
U103	77-78-1	Sulfuric acid, dimethyl ester	U144	301-04-2	Lead phosphate
U105	121-14-2	Benzene, 1-methyl-2,4-dinitro-	U145	7446-27-7	Phosphoric acid, lead(2+) salt (2:3)
U105	121-14-2	2,4-Dinitrotoluene	U145	7446-27-7	Lead, bis(acetato-0)tetrahydroxytri-
U106	606-20-2	Benzene, 2-methyl-1,3-dinitro-	U146	1335-32-6	Lead subacetate
U106	606-20-2	2,6-Dinitrotoluene	U146	1335-32-6	2,5-Furandione
U107	117-84-0	1,2-Benzenedicarboxylic acid, dioctyl ester	U147	108-31-6	Maleic anhydride
U107	117-84-0	Di-n-octyl phthalate	U147	108-31-6	Maleic hydrazide
U108	123-91-1	1,4-Diethyleneoxide	U148	123-33-1	3,6-Pyridazinedione, 1,2-dihydro-
U108	123-91-1	1,4-Dioxane	U148	123-33-1	Malononitrile
U109	122-66-7	1,2-Diphenylhydrazine	U149	109-77-3	Propanedinitrile
U109	122-66-7	Hydrazine, 1,2-diphenyl-	U149	109-77-3	Melphalan
U110	142-84-7	Dipropylamine (I)	U150	148-82-3	L-Phenylalanine, 4-(bis(2-chloroethyl)amino)-
U110	142-84-7	1-Propanamine, N-propyl-(I)	U150	148-82-3	Mercury
U111	621-64-7	Di-n-propylnitrosamine	U151	7439-97-6	Methacrylonitrile (I,T)
U111	621-64-7	1-Propanamine, N-nitroso-N-propyl-	U152	126-98-7	2-Propenenitrile, 2-methyl- (I,T)
U112	141-78-6	Acetic acid ethyl ester (I)	U152	126-98-7	Methanethiol (I,T)
U112	141-78-6	Ethyl acetate (I)	U153	74-93-1	Thiomethanol (I,T)
U113	140-88-5	Ethyl acrylate (I)	U153	74-93-1	Methanol (I)
U113	140-88-5	2-Propenoic acid, ethyl ester (I)	U154	67-56-1	Methyl alcohol (I)
U114	(1)111-54-6	Carbamodithioic acid, 1,2-ethanediylobis-, salts and esters	U154	67-56-1	1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)-
U114	(1)111-54-6	Ethylenebisdithiocarbamic acid, salts and esters	U155	91-80-5	Methapyrilene
U115	75-21-8	Ethylene oxide (I,T)	U155	91-80-5	Carbonochloridic acid, methyl ester (I,T)
U115	75-21-8	Oxirane (I,T)	U156	79-22-1	Methyl chlorocarbonate (I,T)
U116	96-45-7	Ethylenethiourea	U156	79-22-1	Benz(j)aceanthrylene, 1,2-dihydro-3-methyl-
U116	96-45-7	2-Imidazolidinethione	U157	56-49-5	3-Methylcholanthrene
U117	60-29-7	Ethane, 1,1'-oxybis-(I)	U157	56-49-5	Benzenamine, 4,4'-methylenebis(2-chloro-
U117	60-29-7	Ethyl ether (I)	U158	101-14-4	4,4'-Methylenebis(2-chloroaniline)
U118	97-63-2	Ethyl methacrylate	U159	78-93-3	2-Butanone (I,T)
U118	97-63-2	2-Propenoic acid, 2-methyl-, ethyl ester	U159	78-93-3	Methyl ethyl ketone (MEK) (I,T)
U119	62-50-0	Ethyl methanesulfonate	U160	1338-23-4	2-Butanone, peroxide (R,T)
U119	62-50-0	Methanesulfonic acid, ethyl ester	U160	1338-23-4	Methyl ethyl ketone peroxide (R,T)
U120	206-44-0	Fluoranthene	U161	108-10-1	Methyl isobutyl ketone (I)
U121	75-69-4	Methane, trichlorofluoro-	U161	108-10-1	4-Methyl-2-pentanone (I)
U121	75-69-4	Trichloromonofluoromethane	U161	108-10-1	Pentanol, 4-methyl-
U122	50-00-0	Formaldehyde	U162	80-62-6	Methyl methacrylate (I,T)
U123	64-18-6	Formic acid (C,T)	U162	80-62-6	2-Propenoic acid, 2-methyl-, methyl ester (I,T)
U124	110-00-9	Furan (I)	U163	70-25-7	Guanidine, -methyl-N'-nitro-N-nitroso-MNNG
U124	110-00-9	Furfuran (I)	U163	70-25-7	Methylthiouracil
U125	98-01-1	2-Furancarboxaldehyde (I)	U164	56-04-2	4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-
U125	98-01-1	Furfural (I)	U164	56-04-2	Naphthalene
U126	765-34-4	Glycidylaldehyde	U165	91-20-3	1,4-Naphthalenedione
U126	765-34-4	Oxiranecarboxyaldehyde	U166	130-15-4	1,4-Naphthoquinone
U127	118-74-1	Benzene, hexachloro-	U167	134-32-7	1-Naphthalenamine
U127	118-74-1	Hexachlorobenzene	U167	134-32-7	alpha-Naphthylamine
U128	87-68-3	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	U168	91-59-8	2-Naphthalenamine
U128	87-68-3	Hexachlorobutadiene	U168	91-59-8	beta-Naphthylamine
U129	58-89-9	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)-	U169	98-95-3	Benzene, nitro-
U129	58-89-9		U169	98-95-3	Nitrobenzene (I,T)
U129	58-89-9		U170	100-02-7	p-Nitrophenol
U129	58-89-9		U170	100-02-7	Phenol, 4-nitro-
U130	77-47-4	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-	U171	79-46-9	2-Nitropropane (I,T)
U130	77-47-4	Hexachlorocyclopentadiene	U171	79-46-9	Propane, 2-nitro- (I,T)
U131	67-72-1	Ethane, hexachloro-	U172	924-16-3	1-Butanamine, N-butyl-N-nitroso-
U131	67-72-1	Hexachloroethane	U172	924-16-3	N-Nitrosodi-n-butylamine
U132	70-30-4	Hexachlorophene	U173	1116-54-7	Ethanol, 2,2'-(nitrosoimino)bis-
U132	70-30-4	Phenol, 2,2'-methylenebis(3,4,6-trichloro-	U173	1116-54-7	N-Nitrosodiethanolamine
U132	70-30-4		U174	55-18-5	Ethanamine, -ethyl-N-nitroso-
U133	302-01-2	Hydrazine (R,T)	U174	55-18-5	N-Nitrosodiethylamine
U134	7664-39-3	Hydrofluoric acid (C,T)	U176	759-73-9	N-Nitroso-N-ethylurea
U134	7664-39-3	Hydrogen fluoride (C,T)	U176	759-73-9	Urea, N-ethyl-N-nitroso-
U135	7783-06-4	Hydrogen sulfide	U177	684-93-5	N-Nitroso-N-methylurea
U135	7783-06-4	Hydrogen sulfide H2S	U177	684-93-5	Urea, N-methyl-N-nitroso-
U136	75-60-5	Arsinic acid, dimethyl-	U178	615-53-2	Carbamic acid, methylnitroso-, ethyl ester
U136	75-60-5	Cacodylic acid	U178	615-53-2	N-Nitroso-N-methylurethane
U137	193-39-5	Indeno(1,2,3-cd)pyrene	U179	100-75-4	N-Nitrosopiperidine
U138	74-88-4	Methane, iodo-	U179	100-75-4	Piperidine, 1-nitroso-
U138	74-88-4	Methyl iodide	U180	930-55-2	N-Nitrosopyrrolidine
U140	78-83-1	Isobutyl alcohol (I,T)	U180	930-55-2	Pyrrolidine, 1-nitroso-
U140	78-83-1	1-Propanol, 2-methyl- (I,T)	U181	99-55-8	Benzenamine, 2-methyl-5-nitro-
U141	120-58-1	1,3-Benzodioxole, 5-(1-propenyl)-	U181	99-55-8	5-Nitro-o-toluidine
U141	120-58-1	Isosafrole	U182	123-63-7	1,3,5-Trioxane, 2,4,6-trimethyl-
U142	143-50-0	Kepone	U182	123-63-7	Paraldehyde
U142	143-50-0	1,3,4-Metheno-2H-cyclobuta(cd)pentalen-2-one, 1,1a,3,3a,4,5,5a,5b,6-decachlorooctahydro-	U183	608-93-5	Benzene, pentachloro-
U143	303-34-4	2-Butenoic acid, 2-methyl-, 7-((2,3-dihydroxy-2-(1-methoxyethyl)-3-			

U183	608-93-5	Pentachlorobenzene			(3:1)
U184	76-01-7	Ethane, pentachloro-	U235	126-72-7	Tris(2,3-dibromopropyl) phosphate
U184	76-01-7	Pentachloroethane	U236	72-57-1	2,7-Naphthalenedisulfonic acid, 3,3'-(3,3'-dimethyl(1,1'-biphenyl)-4,4'-diyl)bis(azo)bis(5-amino-4-hydroxy)-, tetrasodium salt
U185	82-68-8	Benzene, pentachloronitro-			
U185	82-68-8	Pentachloronitrobenzene (PCNB)			
U186	504-60-9	1-Methylbutadiene (I)			
U186	504-60-9	1,3-Pentadiene (I)	U236	72-57-1	Trypan blue
U187	62-44-2	Acetamide, -(4-ethoxyphenyl)-	U237	66-75-1	2,4-(1H,3H)-Pyrimidinedione, 5-(bis(2-chloroethyl)amino)-
U187	62-44-2	Phenacetin			Uracil shallard
U188	108-95-2	Phenol	U237	66-75-1	Carbamic acid, ethyl ester
U189	1314-80-3	Phosphorus sulfide (R)	U238	51-79-6	Ethyl carbamate (urethane)
U189	1314-80-3	Sulfur phosphide (R)	U238	51-79-6	Benzene, dimethyl- (I,T)
U190	85-44-9	1,3-Isobenzofurandione	U239	1330-20-7	Xylene (I)
U190	85-44-9	Phthalic anhydride	U239	1330-20-7	Acetic acid, (2,4-dichlorophenoxy)-, salts and esters
U191	109-06-8	2-Picoline	U240	(1)94-75-7	2,4-D, salts and esters
U191	109-06-8	Pyridine, 2-methyl-			Hexachloropropene
U192	23950-58-5	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-	U240	(1)94-75-7	1-Propene, 1,1,2,3,3,3-hexachloro-Thioperoxydicarbonic diamide
U192	23950-58-5	Pronamide	U243	1888-71-7	((H2N)C(S))2 S2, tetramethyl-Thiram
U193	1120-71-4	1,2-Oxathiolane, 2,2-dioxide	U244	137-26-8	Cyanogen bromide (CN)Br
U193	1120-71-4	1,3-Propane sultone	U246	506-68-3	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-methoxy-Methoxychlor
U194	107-10-8	1-Propanamine (I,T)	U247	72-43-5	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenyl-butyl)-, and salts, when present at concentrations of 0.3% or less
U194	107-10-8	n-Propylamine (I,T)	U248	(1)81-81-2	Warfarin, and salts, when present at concentrations of 0.3% or less
U196	110-86-1	Pyridine			Zinc phosphide Zn3 P2, when present at concentrations of 10% or less
U197	106-51-4	p-Benzoquinone	U271	17804-35-2	Benomyl
U197	106-51-4	2,5-Cyclohexadiene-1,4-dione	U271	17804-35-2	Carbamic acid, (1-(butylamino)carbonyl)-1H-benzimidazol-2-yl)-, methyl ester
U200	50-55-5	Reserpine	U278	22781-23-3	Bendiocarb
U200	50-55-5	Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-(3,4,5-trimethoxybenzoyloxy)-, methyl ester, (3beta,16beta,17alpha,18beta,20alpha)-	U278	22781-23-3	1,3-Benzodioxol-4-ol, 2,2-dimethyl-, methyl carbamate
U201	108-46-3	1,3-Benzenediol	U279	63-25-2	Carbaryl
U201	108-46-3	Resorcinol	U279	63-25-2	1-Naphthalenol, methylcarbamate
U203	94-59-7	1,3-Benzodioxole, 5-(2-propenyl)-	U280	101-27-9	Barban
U203	94-59-7	Safrole	U280	101-27-9	Carbamic acid, (3-chlorophenyl)-, 4-chloro-2-butynyl ester
U204	7783-00-8	Selenious acid	U328	95-53-4	Benzenamine, 2-methyl-o-Toluidine
U204	7783-00-8	Selenium dioxide	U328	95-53-4	Benzenamine, 4-methyl-p-Toluidine
U205	7488-56-4	Selenium sulfide	U353	106-49-0	Ethanol, 2-ethoxy-
U205	7488-56-4	Selenium sulfide SeS2 (R,T)	U353	106-49-0	Ethylene glycol monoethyl ether
U206	18883-66-4	Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosooureido)-, D-	U359	110-80-5	Bendiocarb phenol
U206	18883-66-4	D-Glucose, 2-deoxy-2-((methylnitrosoamino)-carbonyl)amino)-	U364	22961-82-6	1,3-Benzodioxol-4-ol, 2,2-dimethyl-, 7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-
U206	18883-66-4	Streptozotocin	U364	22961-82-6	Carbofuran phenol
U207	95-94-3	Benzene, 1,2,4,5-tetrachloro-	U367	1563-38-8	Carbamic acid, 1H-benzimidazol-2-yl-, methyl ester
U207	95-94-3	1,2,4,5-Tetrachlorobenzene	U372	10605-21-7	Carbendazim
U208	630-20-6	Ethane, 1,1,1,2-tetrachloro-	U373	122-42-9	Carbamic acid, phenyl-, 1-methylethyl ester
U208	630-20-6	1,1,1,2-Tetrachloroethane	U373	122-42-9	Propham
U209	79-34-5	Ethane, 1,1,2,2-tetrachloro-	U387	52888-80-9	Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester
U209	79-34-5	1,1,2,2-Tetrachloroethane	U387	52888-80-9	Prosulfocarb
U210	127-18-4	Ethene, tetrachloro-	U389	2303-17-5	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3,3-trichloro-2-propenyl) ester
U210	127-18-4	Tetrachloroethylene	U394	30558-43-1	Triallate
U211	56-23-5	Carbon tetrachloride	U394	30558-43-1	A2213
U211	56-23-5	Methane, tetrachloro-			Ethanimidothioic acid, 2-(dimethylamino)-N-hydroxy-2-oxo-, methyl ester
U213	109-99-9	Furan, tetrahydro-(I)	U395	5952-26-1	Diethylene glycol, dicarbamate
U213	109-99-9	Tetrahydrofuran (I)	U395	5952-26-1	Ethanol, 2,2'-oxybis-, dicarbamate
U214	563-68-8	Acetic acid, thallium(1+) salt	U404	121-44-8	Ethanamine, N,N-diethyl-
U214	563-68-8	Thallium(I) acetate	U404	121-44-8	Triethylamine
U215	6533-73-9	Carbonic acid, dithallium(1+) salt	U409	23564-05-8	Carbamic acid, (1,2-phenylenebis(iminocarbonothioyl))bis-, dimethyl ester
U215	6533-73-9	Thallium(I) carbonate	U409	23564-05-8	Thiophanate-methyl
U216	7791-12-0	Thallium(I) chloride	U410	59669-26-0	Ethanimidothioic acid, N,N'-(thiobis((methylimino)carbonyloxy))bis-, dimethyl ester
U216	7791-12-0	Thallium chloride TlCl	U410	59669-26-0	Thiodicarb
U217	10102-45-1	Nitric acid, thallium(1+) salt	U411	114-26-1	Phenol, 2-(1-methylethoxy)-, methylcarbamate
U217	10102-45-1	Thallium(I) nitrate	U411	114-26-1	Propoxur
U218	62-55-5	Ethanethioamide			
U218	62-55-5	Thioacetamide			
U219	62-56-6	Thiourea			
U220	108-88-3	Benzene, methyl-			
U220	108-88-3	Toluene			
U221	25376-45-8	Benzenediamine, ar-methyl-			
U221	25376-45-8	Toluenediamine			
U222	636-21-5	Benzenamine, 2-methyl-, hydrochloride			
U222	636-21-5	o-Toluidine hydrochloride			
U223	26471-62-5	Benzene, 1,3-diisocyanatomethyl- (R,T)			
U223	26471-62-5	Toluene diisocyanate (R,T)			
U225	75-25-2	Bromoform			
U225	75-25-2	Methane, tribromo-			
U226	71-55-6	Ethane, 1,1,1-trichloro-			
U226	71-55-6	Methyl chloroform			
U226	71-55-6	1,1,1-Trichloroethane			
U227	79-00-5	Ethane, 1,1,2-trichloro-			
U227	79-00-5	1,1,2-Trichloroethane			
U228	79-01-6	Ethene, trichloro-			
U228	79-01-6	Trichloroethylene			
U234	99-35-4	Benzene, 1,3,5-trinitro-			
U234	99-35-4	1,3,5-Trinitrobenzene (R,T)			
U235	126-72-7	1-Propanol, 2,3-dibromo-, phosphate			

See F027	93-76-5	Acetic acid, (2,4,5-trichlorophenoxy)-
See F027	7-86-5	Pentachlorophenol
See F027	87-86-5	Phenol, pentachloro-
See F027	58-90-2	Phenol, 2,3,4,6-tetrachloro-
See F027	95-95-4	Phenol, 2,4,5-trichloro-
See F027	88-06-2	Phenol, 2,4,6-trichloro-
See F027	93-72-1	Propanoic acid, 2-(2,4,5-trichlorophenoxy)- Silvex (2,4,5-TP)
See F027	93-72-1	2,4,5-T
See F027	93-76-5	2,3,4,6-Tetrachlorophenol
See F027	58-90-2	2,4,5-Trichlorophenol
See F027	95-95-4	2,4,6-Trichlorophenol

R315-261-35. Lists of Hazardous Wastes - Deletion of Certain Hazardous Waste Codes Following Equipment Cleaning and Replacement.

(a) Wastes from wood preserving processes at plants that do not resume or initiate use of chlorophenolic preservatives will not meet the listing definition of F032 once the generator has met all of the requirements of Subsections R315-261-35(b) and (c). These wastes may, however, continue to meet another hazardous waste listing description or may exhibit one or more of the hazardous waste characteristics.

(b) Generators shall either clean or replace all process equipment that may have come into contact with chlorophenolic formulations or constituents thereof, including, but not limited to, treatment cylinders, sumps, tanks, piping systems, drip pads, fork lifts, and trams, in a manner that minimizes or eliminates the escape of hazardous waste or constituents, leachate, contaminated drippage, or hazardous waste decomposition products to the ground water, surface water, or atmosphere.

(1) Generators shall do one of the following:

(i) Prepare and follow an equipment cleaning plan and clean equipment in accordance with Section R315-261-35;

(ii) Prepare and follow an equipment replacement plan and replace equipment in accordance with Section R315-261-35; or

(iii) Document cleaning and replacement in accordance with Section R315-261-35, carried out after termination of use of chlorophenolic preservations.

(2) Cleaning Requirements.

(i) Prepare and sign a written equipment cleaning plan that describes:

- (A) The equipment to be cleaned;
- (B) How the equipment will be cleaned;
- (C) The solvent to be used in cleaning;
- (D) How solvent rinses will be tested; and
- (E) How cleaning residues will be disposed.

(ii) Equipment shall be cleaned as follows:

(A) Remove all visible residues from process equipment;

(B) Rinse process equipment with an appropriate solvent until dioxins and dibenzofurans are not detected in the final solvent rinse.

(iii) Analytical requirements.

(A) Rinses shall be tested by using an appropriate method.

(B) "Not detected" means at or below the following lower method calibration limits (MCLs): The 2,3,7,8-TCDD-based MCL-0.01 parts per trillion (ppt), sample weight of 1000 g, IS spiking level of 1 ppt, final extraction volume of 10-50 microliters. For other congeners-multiply the values by 1 for TCDF/PeCDD/PeCDF, by 2.5 for HxCDD/HxCDF/ HpCDD/ HpCDF, and by 5 for OCDD/OCDF.

(iv) The generator shall manage all residues from the cleaning process as F032 waste.

(3) Replacement requirements.

(i) Prepare and sign a written equipment replacement plan that describes:

- (A) The equipment to be replaced;
- (B) How the equipment will be replaced; and
- (C) How the equipment will be disposed.

(ii) The generator shall manage the discarded equipment as F032 waste.

(4) Documentation requirements.

(i) Document that previous equipment cleaning and/or replacement was performed in accordance with Section R315-261-35 and occurred after cessation of use of chlorophenolic preservatives.

(c) The generator shall maintain the following records documenting the cleaning and replacement as part of the facility's operating record:

(1) The name and address of the facility;

(2) Formulations previously used and the date on which their use ceased in each process at the plant;

(3) Formulations currently used in each process at the plant;

(4) The equipment cleaning or replacement plan;

(5) The name and address of any persons who conducted the cleaning and replacement;

(6) The dates on which cleaning and replacement were accomplished;

(7) The dates of sampling and testing;

(8) A description of the sample handling and preparation techniques, including techniques used for extraction, containerization, preservation, and chain-of-custody of the samples;

(9) A description of the tests performed, the date the tests were performed, and the results of the tests;

(10) The name and model numbers of the instrument(s) used in performing the tests;

(11) QA/QC documentation; and

(12) The following statement signed by the generator or his authorized representative: I certify under penalty of law that all process equipment required to be cleaned or replaced under Section R315-261-35 was cleaned or replaced as represented in the equipment cleaning and replacement plan and accompanying documentation. I am aware that there are significant penalties for providing false information, including the possibility of fine or imprisonment.

R315-261-39. Exclusions and Exemptions - Conditional Exclusion for Used, Broken Cathode Ray Tubes (CRTs) and Processed CRT Glass Undergoing Recycling.

Used, broken CRTs are not solid wastes if they meet the following conditions:

(a) Prior to processing: These materials are not solid wastes if they are destined for recycling and if they meet the following requirements:

(1) Storage. The broken CRTs shall be either:

(i) Stored in a building with a roof, floor, and walls, or

(ii) Placed in a container, i.e., a package or a vehicle, that is constructed, filled, and closed to minimize releases to the environment of CRT glass, including fine solid materials.

(2) Labeling. Each container in which the used, broken CRT is contained shall be labeled or marked clearly with one of the following phrases: "Used cathode ray tube(s)-contains leaded glass" or "Leaded glass from televisions or computers." It shall also be labeled: "Do not mix with other glass materials."

(3) Transportation. The used, broken CRTs shall be transported in a container meeting the requirements of Subsections R315-261-39(a)(1)(ii) and (2).

(4) Speculative accumulation and use constituting disposal. The used, broken CRTs are subject to the limitations on speculative accumulation as defined in Subsection R315-261-39(c)(8). If they are used in a manner constituting disposal, they shall comply with the applicable requirements of Sections R315-266-20 through 23 instead of the requirements of Section R315-261-39.

(5) Exports. In addition to the applicable conditions specified in Subsections R315-261-39(a)(1) through (4), exporters of used, broken CRTs shall comply with the following requirements:

(i) Notify EPA of an intended export before the CRTs are scheduled to leave the United States. A complete notification should be submitted sixty days before the initial shipment is intended to be shipped off-site. This notification may cover export activities extending over a twelve month or lesser period. The notification shall be in writing, signed by the exporter, and include the following information:

(A) Name, mailing address, telephone number and EPA ID number, if applicable, of the exporter of the CRTs.

(B) The estimated frequency or rate at which the CRTs are to be exported and the period of time over which they are to be exported.

(C) The estimated total quantity of CRTs specified in kilograms.

(D) All points of entry to and departure from each foreign country through which the CRTs will pass.

(E) A description of the means by which each shipment of the CRTs will be transported; e.g., mode of transportation vehicle, air, highway, rail, water, etc.; type(s) of container, drums, boxes, tanks, etc.

(F) The name and address of the recycler or recyclers and the estimated quantity of used CRTs to be sent to each facility, as well as the names of any alternate recyclers.

(G) A description of the manner in which the CRTs will be recycled in the foreign country that will be receiving the CRTs.

(H) The name of any transit country through which the CRTs will be sent and a description of the approximate length of time the CRTs will remain in such country and the nature of their handling while there.

(ii) Notifications submitted by mail should be sent to the following mailing address: Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division, (Mail Code 2254A), Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460. Hand-delivered notifications should be sent to: Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division, (Mail Code 2254A), Environmental Protection Agency, Ariel Rios Bldg., Room 6144, 1200 Pennsylvania Ave., NW., Washington, DC. In both cases, the following shall be prominently displayed on the front of the envelope: "Attention: Notification of Intent to Export CRTs."

(iii) Upon request by EPA, the exporter shall furnish to EPA any additional information which a receiving country requests in order to respond to a notification.

(iv) EPA shall provide a complete notification to the receiving country and any transit countries. A notification is complete when EPA receives a notification which EPA determines satisfies the requirements of Subsection R315-261-39(a)(5)(i). Where a claim of confidentiality is asserted with respect to any notification information required by Subsection R315-261-39(a)(5)(i), EPA may find the notification not complete until any such claim is resolved in accordance with 40 CFR 260.2.

(v) The export of CRTs is prohibited unless the receiving country consents to the intended export. When the receiving country consents in writing to the receipt of the CRTs, EPA shall forward an Acknowledgment of Consent to Export CRTs to the exporter. Where the receiving country objects to receipt of the CRTs or withdraws a prior consent, EPA shall notify the exporter in writing. EPA shall also notify the exporter of any responses from transit countries.

(vi) When the conditions specified on the original notification change, the exporter shall provide EPA with a written renofication of the change, except for changes to the telephone number in Subsection R315-261-39(a)(5)(i)(A) and decreases in the quantity indicated pursuant to Subsection R315-261-39(a)(5)(i)(C). The shipment cannot take place until

consent of the receiving country to the changes has been obtained, except for changes to information about points of entry and departure and transit countries pursuant to Subsections R315-261-39(a)(5)(i)(D) and (a)(5)(i)(H), and the exporter of CRTs receives from EPA a copy of the Acknowledgment of Consent to Export CRTs reflecting the receiving country's consent to the changes.

(vii) A copy of the Acknowledgment of Consent to Export CRTs shall accompany the shipment of CRTs. The shipment shall conform to the terms of the Acknowledgment.

(viii) If a shipment of CRTs cannot be delivered for any reason to the recycler or the alternate recycler, the exporter of CRTs shall renofity EPA of a change in the conditions of the original notification to allow shipment to a new recycler in accordance with Subsection R315-261-39(a)(5)(vi) and obtain another Acknowledgment of Consent to Export CRTs.

(ix) Exporters shall keep copies of notifications and Acknowledgments of Consent to Export CRTs for a period of three years following receipt of the Acknowledgment.

(x) CRT exporters shall file with EPA no later than March 1 of each year, an annual report summarizing the quantities, in kilograms; frequency of shipment; and ultimate destination(s), i.e., the facility or facilities where the recycling occurs, of all used CRTs exported during the previous calendar year. Such reports shall also include the following:

(A) The name; EPA ID number, if applicable; and mailing and site address of the exporter;

(B) The calendar year covered by the report;

(C) A certification signed by the CRT exporter that states:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents and that, based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

(xi) Annual reports shall be submitted to the office specified in Subsection R315-261-39(a)(5)(ii). Exporters shall keep copies of each annual report for a period of at least three years from the due date of the report.

(b) Requirements for used CRT processing: Used, broken CRTs undergoing CRT processing as defined in Section R315-260-10 are not solid wastes if they meet the following requirements:

(1) Storage. Used, broken CRTs undergoing processing are subject to the requirement of Subsection R315-261-39(a)(4).

(2) Processing.

(i) All activities specified in Subsections (ii) and (iii) of the definition of CRT Processing in Section R315-260-10 shall be performed within a building with a roof, floor, and walls; and

(ii) No activities may be performed that use temperatures high enough to volatilize lead from CRTs.

(c) Processed CRT glass sent to CRT glass making or lead smelting: Glass from used CRTs that is destined for recycling at a CRT glass manufacturer or a lead smelter after processing is not a solid waste unless it is speculatively accumulated as defined in Subsection R315-261-1(c)(8).

(d) Use constituting disposal: Glass from used CRTs that is used in a manner constituting disposal shall comply with the requirements of Section R315-266-20 through 23 instead of the requirements of Section R315-261-39.

R315-261-40. Exclusions and Exemptions - Conditional Exclusion for Used, Intact Cathode Ray Tubes (CRTs) Exported for Recycling.

Used, intact CRTs exported for recycling are not solid wastes if they meet the notice and consent conditions of Subsection R315-261-39(a)(5), and if they are not speculatively

accumulated as defined in Subsection R315-261-1(c)(8).

R315-261-41. Exclusions and Exemptions - Notification and Recordkeeping for Used, Intact Cathode Ray Tubes (CRTs) Exported for Reuse.

(a) CRT exporters who export used, intact CRTs for reuse shall send a notification to EPA. This notification may cover export activities extending over a 12 month or lesser period.

(1) The notification shall be in writing, signed by the exporter, and include the following information:

(i) Name, mailing address, telephone number, and EPA ID number, if applicable, of the exporter of the used, intact CRTs;

(ii) The estimated frequency or rate at which the used, intact CRTs are to be exported for reuse and the period of time over which they are to be exported;

(iii) The estimated total quantity of used, intact CRTs specified in kilograms;

(iv) All points of entry to and departure from each transit country through which the used, intact CRTs will pass, a description of the approximate length of time the used, intact CRTs will remain in such country, and the nature of their handling while there;

(v) A description of the means by which each shipment of the used, intact CRTs will be transported; e.g., mode of transportation vehicle, air, highway, rail, water, etc.; type(s) of container, drums, boxes, tanks, etc.;

(vi) The name and address of the ultimate destination facility or facilities where the used, intact CRTs will be reused, refurbished, distributed, or sold for reuse and the estimated quantity of used, intact CRTs to be sent to each facility, as well as the name of any alternate destination facility or facilities;

(vii) A description of the manner in which the used, intact CRTs will be reused, including reuse after refurbishment, in the foreign country that will be receiving the used, intact CRTs; and

(viii) A certification signed by the CRT exporter that states: "I certify under penalty of law that the CRTs described in this notice are intact and fully functioning or capable of being functional after refurbishment and that the used CRTs will be reused or refurbished and reused. I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

(2) Notifications submitted by mail should be sent to the following mailing address: Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division, (Mail Code 2254A), Environmental Protection Agency, 1200 Pennsylvania Ave. NW., Washington, DC 20460. Hand-delivered notifications should be sent to: Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division, (Mail Code 2254A), Environmental Protection Agency, William Jefferson Clinton Building, Room 6144, 1200 Pennsylvania Ave. NW., Washington, DC 20004. In both cases, the following shall be prominently displayed on the front of the envelope: "Attention: Notification of Intent to Export CRTs."

(b) CRT exporters of used, intact CRTs sent for reuse shall keep copies of normal business records, such as contracts, demonstrating that each shipment of exported used, intact CRTs will be reused. This documentation shall be retained for a period of at least three years from the date the CRTs were exported. If the documents are written in a language other than English, CRT exporters of used, intact CRTs sent for reuse shall provide both the original, non-English version of the normal business records as well as a third-party translation of the

normal business records into English within 30 days upon request by EPA.

R315-261-140. Financial Requirements for Management of Excluded Hazardous Secondary Materials - Applicability.

(a) The requirements of Sections R315-261-140 through 143 and R315-261-147 through 151 and Appendix I to R315-261 apply to owners or operators of reclamation and intermediate facilities managing hazardous secondary materials excluded under Subsection R315-261-4(a)(24), except as provided otherwise in Subsection R315-261-140(b).

(b) States and the Federal government are exempt from the financial assurance requirements of Sections R315-261-140 through 143 and R315-261-147 through 151.

R315-261-141. Financial Requirements for Management of Excluded Hazardous Secondary Materials - Definitions of Terms as Used in Sections R315-261-140 Through 151.

The terms defined in 40 CFR 265.141(d), (f), (g), and (h), which are adopted by reference, have the same meaning in Sections R315-140 through 143 and R315-261-147 through 151 as they do in 40 CFR 265.141, which is adopted by reference.

R315-261-142. Financial Requirements for Management of Excluded Hazardous Secondary Materials - Cost Estimate.

(a) The owner or operator shall have a detailed written estimate, in current dollars, of the cost of disposing of any hazardous secondary material as listed or characteristic hazardous waste, and the potential cost of closing the facility as a treatment, storage, and disposal facility.

(1) The estimate shall equal the cost of conducting the activities described in Subsection R315-261-142(a) at the point when the extent and manner of the facility's operation would make these activities the most expensive; and

(2) The cost estimate shall be based on the costs to the owner or operator of hiring a third party to conduct these activities. A third party is a party who is neither a parent nor a subsidiary of the owner or operator. See definition of parent corporation in 40 CFR 265.141(d), which is adopted by reference. The owner or operator may use costs for on-site disposal in accordance with applicable requirements if he can demonstrate that on-site disposal capacity will exist at all times over the life of the facility.

(3) The cost estimate may not incorporate any salvage value that may be realized with the sale of hazardous secondary materials, or hazardous or non-hazardous wastes if applicable under 40 CFR 265.113(d), which is adopted by reference; facility structures or equipment, land, or other assets associated with the facility.

(4) The owner or operator may not incorporate a zero cost for hazardous secondary materials, or hazardous or non-hazardous wastes if applicable under 40 CFR 265.113(d), which is adopted by reference, that might have economic value.

(b) During the active life of the facility, the owner or operator shall adjust the cost estimate for inflation within 60 days prior to the anniversary date of the establishment of the financial instrument(s) used to comply with Section R315-261-143. For owners and operators using the financial test or corporate guarantee, the cost estimate shall be updated for inflation within 30 days after the close of the firm's fiscal year and before submission of updated information to the Director as specified in Subsection R315-261-143(e)(3). The adjustment may be made by recalculating the cost estimate in current dollars, or by using an inflation factor derived from the most recent Implicit Price Deflator for Gross National Product published by the U.S. Department of Commerce in its Survey of Current Business, as specified in Subsections R315-261-142(b)(1) and (2). The inflation factor is the result of dividing the latest published annual Deflator by the Deflator for the

previous year.

(1) The first adjustment is made by multiplying the cost estimate by the inflation factor. The result is the adjusted cost estimate.

(2) Subsequent adjustments are made by multiplying the latest adjusted cost estimate by the latest inflation factor.

(c) During the active life of the facility, the owner or operator shall revise the cost estimate no later than 30 days after a change in a facility's operating plan or design that would increase the costs of conducting the activities described in Subsection R315-261-142(a) or no later than 60 days after an unexpected event which increases the cost of conducting the activities described in Subsection R315-261-142(a). The revised cost estimate shall be adjusted for inflation as specified in Subsection R315-261-142(b).

(d) The owner or operator shall keep the following at the facility during the operating life of the facility: The latest cost estimate prepared in accordance with Subsections R315-261-142(a) and (c) and, when this estimate has been adjusted in accordance with Subsection R315-261-142(b), the latest adjusted cost estimate.

R315-261-143. Financial Requirements for Management of Excluded Hazardous Secondary Materials - Financial Assurance Condition.

As provided in Subsection R315-261-4(a)(24)(vi)(F), an owner or operator of a reclamation or intermediate facility shall have financial assurance as a condition of the exclusion as required under Subsection R315-261-4(a)(24). He shall choose from the options as specified in Subsections R315-261-143(a) through (e).

(a) Trust fund.

(1) An owner or operator may satisfy the requirements of Section R315-261-143 by establishing a trust fund which conforms to the requirements of Subsection R315-261-143(a) and submitting an originally signed duplicate of the trust agreement to the Director. The trustee shall be an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a Federal or State agency.

(2) The wording of the trust agreement shall be identical to the wording specified in Subsection R315-261-151(a)(1), and the trust agreement shall be accompanied by a formal certification of acknowledgment, for example, see Subsection R315-261-151(a)(2). Schedule A of the trust agreement shall be updated within 60 days after a change in the amount of the current cost estimate covered by the agreement.

(3) The trust fund shall be funded for the full amount of the current cost estimate before it may be relied upon to satisfy the requirements of Section R315-261-143.

(4) Whenever the current cost estimate changes, the owner or operator shall compare the new estimate with the trustee's most recent annual valuation of the trust fund. If the value of the fund is less than the amount of the new estimate, the owner or operator, within 60 days after the change in the cost estimate, shall either deposit an amount into the fund so that its value after this deposit at least equals the amount of the current cost estimate, or obtain other financial assurance as specified in Section R315-261-143 to cover the difference.

(5) If the value of the trust fund is greater than the total amount of the current cost estimate, the owner or operator may submit a written request to the Director for release of the amount in excess of the current cost estimate.

(6) If an owner or operator substitutes other financial assurance as specified in Section R315-261-143 for all or part of the trust fund, he may submit a written request to the Director for release of the amount in excess of the current cost estimate covered by the trust fund.

(7) Within 60 days after receiving a request from the owner or operator for release of funds as specified in

Subsections R315-261-143(a)(5) or (6), the Director shall instruct the trustee to release to the owner or operator such funds as the Director specifies in writing. If the owner or operator begins final closure under Sections R315-264-110 through 120 or 40 CFR 265.110 through 121, which is adopted by reference; an owner or operator may request reimbursements for partial or final closure expenditures by submitting itemized bills to the Director. The owner or operator may request reimbursements for partial closure only if sufficient funds are remaining in the trust fund to cover the maximum costs of closing the facility over its remaining operating life. No later than 60 days after receiving bills for partial or final closure activities, the Director shall instruct the trustee to make reimbursements in those amounts as the Director specifies in writing, if the Director determines that the partial or final closure expenditures are in accordance with the approved closure plan, or otherwise justified. If the Director has reason to believe that the maximum cost of closure over the remaining life of the facility will be significantly greater than the value of the trust fund, he may withhold reimbursements of such amounts as he deems prudent until he determines, in accordance with 40 CFR 265.143(i), which is adopted by reference, that the owner or operator is no longer required to maintain financial assurance for final closure of the facility. If the Director does not instruct the trustee to make such reimbursements, he shall provide to the owner or operator a detailed written statement of reasons.

(8) The Director shall agree to termination of the trust when:

(i) An owner or operator substitutes alternate financial assurance as specified in Section R315-261-143; or

(ii) The Director releases the owner or operator from the requirements of Section R315-261-143 in accordance with Subsection R315-261-143(i).

(b) Surety bond guaranteeing payment into a trust fund.

(1) An owner or operator may satisfy the requirements of Section R315-261-143 by obtaining a surety bond which conforms to the requirements of Subsection R315-261-143(b) and submitting the bond to the Director. The surety company issuing the bond shall, at a minimum, be among those listed as acceptable sureties on Federal bonds in Circular 570 of the U.S. Department of the Treasury.

(2) The wording of the surety bond shall be identical to the wording specified in Subsection R315-261-151(b).

(3) The owner or operator who uses a surety bond to satisfy the requirements of Section R315-261-143 shall also establish a standby trust fund. Under the terms of the bond, all payments made thereunder shall be deposited by the surety directly into the standby trust fund in accordance with instructions from the Director. This standby trust fund shall meet the requirements specified in Subsection R315-261-143(a), except that:

(i) An originally signed duplicate of the trust agreement shall be submitted to the Director with the surety bond; and

(ii) Until the standby trust fund is funded pursuant to the requirements of Section R315-261-143, the following are not required by these regulations:

(A) Payments into the trust fund as specified in Subsection R315-261-143(a);

(B) Updating of Schedule A of the trust agreement, see Subsection R315-261-151(a), to show current cost estimates;

(C) Annual valuations as required by the trust agreement; and

(D) Notices of nonpayment as required by the trust agreement.

(4) The bond shall guarantee that the owner or operator shall:

(i) Fund the standby trust fund in an amount equal to the penal sum of the bond before loss of the exclusion under Subsection R315-261-4(a)(24) or

(ii) Fund the standby trust fund in an amount equal to the penal sum within 15 days after an administrative order to begin closure issued by the Director becomes final, or within 15 days after an order to begin closure is issued by a U.S. district court or other court of competent jurisdiction; or

(iii) Provide alternate financial assurance as specified in Section R315-261-143, and obtain the Director's written approval of the assurance provided, within 90 days after receipt by both the owner or operator and the Director of a notice of cancellation of the bond from the surety.

(5) Under the terms of the bond, the surety shall become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond.

(6) The penal sum of the bond shall be in an amount at least equal to the current cost estimate, except as provided in Subsection R315-261-143(f).

(7) Whenever the current cost estimate increases to an amount greater than the penal sum, the owner or operator, within 60 days after the increase, shall either cause the penal sum to be increased to an amount at least equal to the current cost estimate and submit evidence of such increase to the Director, or obtain other financial assurance as specified in Section R315-261-143 to cover the increase. Whenever the current cost estimate decreases, the penal sum may be reduced to the amount of the current cost estimate following written approval by the Director.

(8) Under the terms of the bond, the surety may cancel the bond by sending notice of cancellation by certified mail to the owner or operator and to the Director. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Director, as evidenced by the return receipts.

(9) The owner or operator may cancel the bond if the Director has given prior written consent based on his receipt of evidence of alternate financial assurance as specified in Section R315-261-143.

(c) Letter of credit.

(1) An owner or operator may satisfy the requirements of Section R315-261-143 by obtaining an irrevocable standby letter of credit which conforms to the requirements of Subsection R315-261-143(c) and submitting the letter to the Director. The issuing institution shall be an entity which has the authority to issue letters of credit and whose letter-of-credit operations are regulated and examined by a Federal or State agency.

(2) The wording of the letter of credit shall be identical to the wording specified in Subsection R315-261-151(c).

(3) An owner or operator who uses a letter of credit to satisfy the requirements of Section R315-261-143 shall also establish a standby trust fund. Under the terms of the letter of credit, all amounts paid pursuant to a draft by the Director shall be deposited by the issuing institution directly into the standby trust fund in accordance with instructions from the Director. This standby trust fund shall meet the requirements of the trust fund specified in Subsection R315-261-143(a), except that:

(i) An originally signed duplicate of the trust agreement shall be submitted to the Director with the letter of credit; and

(ii) Unless the standby trust fund is funded pursuant to the requirements of Section R315-261-143, the following are not required by these regulations:

(A) Payments into the trust fund as specified in Subsection R315-261-143(a);

(B) Updating of Schedule A of the trust agreement, see Subsection R315-261-151(a), to show current cost estimates;

(C) Annual valuations as required by the trust agreement; and

(D) Notices of nonpayment as required by the trust agreement.

(4) The letter of credit shall be accompanied by a letter

from the owner or operator referring to the letter of credit by number, issuing institution, and date, and providing the following information: The EPA Identification Number, if any issued; name; and address of the facility; and the amount of funds assured for the facility by the letter of credit.

(5) The letter of credit shall be irrevocable and issued for a period of at least 1 year. The letter of credit shall provide that the expiration date shall be automatically extended for a period of at least 1 year unless, at least 120 days before the current expiration date, the issuing institution notifies both the owner or operator and the Director by certified mail of a decision not to extend the expiration date. Under the terms of the letter of credit, the 120 days will begin on the date when both the owner or operator and the Director have received the notice, as evidenced by the return receipts.

(6) The letter of credit shall be issued in an amount at least equal to the current cost estimate, except as provided in Subsection R315-261-143(f).

(7) Whenever the current cost estimate increases to an amount greater than the amount of the credit, the owner or operator, within 60 days after the increase, shall either cause the amount of the credit to be increased so that it at least equals the current cost estimate and submit evidence of such increase to the Director, or obtain other financial assurance as specified in Section R315-261-143 to cover the increase. Whenever the current cost estimate decreases, the amount of the credit may be reduced to the amount of the current cost estimate following written approval by the Director.

(8) Following a determination by the Director that the hazardous secondary materials do not meet the conditions of the exclusion under Subsection R315-261-4(a)(24), the Director may draw on the letter of credit.

(9) If the owner or operator does not establish alternate financial assurance as specified in Section R315-261-143 and obtain written approval of such alternate assurance from the Director within 90 days after receipt by both the owner or operator and the Director of a notice from the issuing institution that it has decided not to extend the letter of credit beyond the current expiration date, the Director shall draw on the letter of credit. The Director may delay the drawing if the issuing institution grants an extension of the term of the credit. During the last 30 days of any such extension the Director shall draw on the letter of credit if the owner or operator has failed to provide alternate financial assurance as specified in Section R315-261-143 and obtain written approval of such assurance from the Director.

(10) The Director shall return the letter of credit to the issuing institution for termination when:

(i) An owner or operator substitutes alternate financial assurance as specified in Section R315-261-143; or

(ii) The Director releases the owner or operator from the requirements of Section R315-261-143 in accordance with Subsection R315-261-143(i).

(d) Insurance.

(1) An owner or operator may satisfy the requirements of Section R315-261-143 by obtaining insurance which conforms to the requirements of Subsection R315-261-143(d) and submitting a certificate of such insurance to the Director. At a minimum, the insurer shall be licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in Utah. (2) The wording of the certificate of insurance shall be identical to the wording specified in Subsection R315-261-151(d).

(3) The insurance policy shall be issued for a face amount at least equal to the current cost estimate, except as provided in subsection R315-261-143(f). The term "face amount" means the total amount the insurer is obligated to pay under the policy. Actual payments by the insurer will not change the face amount, although the insurer's future liability shall be lowered by the

amount of the payments.

(4) The insurance policy shall guarantee that funds shall be available whenever needed to pay the cost of removal of all hazardous secondary materials from the unit, to pay the cost of decontamination of the unit, to pay the costs of the performance of activities required under Sections R315-264-110 through 120 or 40 CFR 265.110 through 121, which is adopted by reference; as applicable, for the facilities covered by this policy. The policy shall also guarantee that once funds are needed, the insurer shall be responsible for paying out funds, up to an amount equal to the face amount of the policy, upon the direction of the Director, to such party or parties as the Director specifies.

(5) After beginning partial or final closure under Rules R315-264 or 265, as applicable, an owner or operator or any other authorized person may request reimbursements for closure expenditures by submitting itemized bills to the Director. The owner or operator may request reimbursements only if the remaining value of the policy is sufficient to cover the maximum costs of closing the facility over its remaining operating life. Within 60 days after receiving bills for closure activities, the Director shall instruct the insurer to make reimbursements in such amounts as the Director specifies in writing if the Director determines that the expenditures are in accordance with the approved plan or otherwise justified. If the Director has reason to believe that the maximum cost over the remaining life of the facility will be significantly greater than the face amount of the policy, he may withhold reimbursement of such amounts as he deems prudent until he determines, in accordance with Subsection R315-261-143(h), that the owner or operator is no longer required to maintain financial assurance for the particular facility. If the Director does not instruct the insurer to make such reimbursements, he shall provide to the owner or operator a detailed written statement of reasons.

(6) The owner or operator shall maintain the policy in full force and effect until the Director consents to termination of the policy by the owner or operator as specified in Subsection R315-261-143(i)(10). Failure to pay the premium, without substitution of alternate financial assurance as specified in Section R315-261-143, shall constitute a significant violation of these regulations warranting such remedy as the Director deems necessary. Such violation shall be deemed to begin upon receipt by the Director of a notice of future cancellation, termination, or failure to renew due to nonpayment of the premium, rather than upon the date of expiration.

(7) Each policy shall contain a provision allowing assignment of the policy to a successor owner or operator. Such assignment may be conditional upon consent of the insurer, provided such consent is not unreasonably refused.

(8) The policy shall provide that the insurer may not cancel, terminate, or fail to renew the policy except for failure to pay the premium. The automatic renewal of the policy shall, at a minimum, provide the insured with the option of renewal at the face amount of the expiring policy. If there is a failure to pay the premium, the insurer may elect to cancel, terminate, or fail to renew the policy by sending notice by certified mail to the owner or operator and the Director. Cancellation, termination, or failure to renew may not occur, however, during the 120 days beginning with the date of receipt of the notice by both the Director and the owner or operator, as evidenced by the return receipts. Cancellation, termination, or failure to renew may not occur and the policy shall remain in full force and effect in the event that on or before the date of expiration:

- (i) The Director deems the facility abandoned; or
- (ii) Conditional exclusion or interim status is lost, terminated, or revoked; or
- (iii) Closure is ordered by the Director or a U.S. district court or other court of competent jurisdiction; or
- (iv) The owner or operator is named as debtor in a voluntary or involuntary proceeding under Title 11

(Bankruptcy), U.S. Code; or

(v) The premium due is paid.

(9) Whenever the current cost estimate increases to an amount greater than the face amount of the policy, the owner or operator, within 60 days after the increase, shall either cause the face amount to be increased to an amount at least equal to the current cost estimate and submit evidence of such increase to the Director, or obtain other financial assurance as specified in Section R315-261-143 to cover the increase. Whenever the current cost estimate decreases, the face amount may be reduced to the amount of the current cost estimate following written approval by the Director.

(10) The Director shall give written consent to the owner or operator that he may terminate the insurance policy when:

- (i) An owner or operator substitutes alternate financial assurance as specified in Section R315-261-143; or
- (ii) The Director releases the owner or operator from the requirements of Section R315-261-143 in accordance with Subsection R315-261-143(i).

(e) Financial test and corporate guarantee.

(1) An owner or operator may satisfy the requirements of Section R315-261-143 by demonstrating that he passes a financial test as specified in Subsection R315-261-143(e). To pass this test the owner or operator shall meet the criteria of either Subsections R315-261-143(e)(1)(i) or (ii):

(i) The owner or operator shall have:

(A) Two of the following three ratios: A ratio of total liabilities to net worth less than 2.0; a ratio of the sum of net income plus depreciation, depletion, and amortization to total liabilities greater than 0.1; and a ratio of current assets to current liabilities greater than 1.5; and

(B) Net working capital and tangible net worth each at least six times the sum of the current cost estimates and the current plugging and abandonment cost estimates; and

(C) Tangible net worth of at least \$10 million; and

(D) Assets located in the United States amounting to at least 90 percent of total assets or at least six times the sum of the current cost estimates and the current plugging and abandonment cost estimates.

(ii) The owner or operator shall have:

(A) A current rating for his most recent bond issuance of AAA, AA, A, or BBB as issued by Standard and Poor's or Aaa, Aa, A, or Baa as issued by Moody's; and

(B) Tangible net worth at least six times the sum of the current cost estimates and the current plugging and abandonment cost estimates; and

(C) Tangible net worth of at least \$10 million; and

(D) Assets located in the United States amounting to at least 90 percent of total assets or at least six times the sum of the current cost estimates and the current plugging and abandonment cost estimates.

(2) The phrase "current cost estimates" as used in Subsection R315-261-143(e)(1) refers to the cost estimates required to be shown in paragraphs 1-4 of the letter from the owner's or operator's chief financial officer, Subsection R315-261-151(e). The phrase "current plugging and abandonment cost estimates" as used in Subsection R315-261-143(e)(1) refers to the cost estimates required to be shown in paragraphs 1-4 of the letter from the owner's or operator's chief financial officer, 40 CFR 144.70(f).

(3) To demonstrate that he meets this test, the owner or operator shall submit the following items to the Director:

(i) A letter signed by the owner's or operator's chief financial officer and worded as specified in Subsection R315-261-151(e); and

(ii) A copy of the independent certified public accountant's report on examination of the owner's or operator's financial statements for the latest completed fiscal year; and

(iii) If the chief financial officer's letter providing evidence

of financial assurance includes financial data showing that the owner or operator satisfies Subsection R315-261-143(e)(1)(i) that are different from the data in the audited financial statements referred to in Subsection R315-261-143(e)(3)(ii) or any other audited financial statement or data filed with the SEC, then a special report from the owner's or operator's independent certified public accountant to the owner or operator is required. The special report shall be based upon an agreed upon procedures engagement in accordance with professional auditing standards and shall describe the procedures performed in comparing the data in the chief financial officer's letter derived from the independently audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements, the findings of the comparison, and the reasons for any differences.

(4) The owner or operator may obtain an extension of the time allowed for submission of the documents specified in Subsection R315-261-143(e)(3) if the fiscal year of the owner or operator ends during the 90 days prior to the effective date of these regulations and if the year-end financial statements for that fiscal year shall be audited by an independent certified public accountant. The extension shall end no later than 90 days after the end of the owner's or operator's fiscal year. To obtain the extension, the owner's or operator's chief financial officer shall send, by the effective date of these regulations, a letter to the Director. This letter from the chief financial officer shall:

- (i) Request the extension;
- (ii) Certify that he has grounds to believe that the owner or operator meets the criteria of the financial test;
- (iii) Specify for each facility to be covered by the test the EPA Identification Number, if any are issued; name; address; and current cost estimates to be covered by the test;
- (iv) Specify the date ending the owner's or operator's last complete fiscal year before the effective date of Sections R315-261-140 through 143 and R315-261-147 through 151;
- (v) Specify the date, no later than 90 days after the end of such fiscal year, when he shall submit the documents specified in Subsection R315-261-143 (e)(3); and
- (vi) Certify that the year-end financial statements of the owner or operator for such fiscal year shall be audited by an independent certified public accountant.

(5) After the initial submission of items specified in Subsection R315-261-143(e)(3), the owner or operator shall send updated information to the Director within 90 days after the close of each succeeding fiscal year. This information shall consist of all three items specified in Subsection R315-261-143(e)(3).

(6) If the owner or operator no longer meets the requirements of Subsection R315-261-143(e)(1), he shall send notice to the Director of intent to establish alternate financial assurance as specified in Section R315-261-143. The notice shall be sent by certified mail within 90 days after the end of the fiscal year for which the year-end financial data show that the owner or operator no longer meets the requirements. The owner or operator shall provide the alternate financial assurance within 120 days after the end of such fiscal year.

(7) The Director may, based on a reasonable belief that the owner or operator may no longer meet the requirements of Subsection R315-261-143(e)(1), require reports of financial condition at any time from the owner or operator in addition to those specified in Subsection R315-261-143(e)(3). If the Director finds, on the basis of such reports or other information, that the owner or operator no longer meets the requirements of Subsection R315-261-143(e)(1), the owner or operator shall provide alternate financial assurance as specified in Section R315-261-143 within 30 days after notification of such a finding.

(8) The Director may disallow use of this test on the basis of qualifications in the opinion expressed by the independent

certified public accountant in his report on examination of the owner's or operator's financial statements, see Subsection R315-261-143(e)(3)(ii). An adverse opinion or a disclaimer of opinion shall be cause for disallowance. The Director shall evaluate other qualifications on an individual basis. The owner or operator shall provide alternate financial assurance as specified in Section R315-261-143 within 30 days after notification of the disallowance.

(9) The owner or operator is no longer required to submit the items specified in Subsection R315-261-143(e)(3) when:

- (i) An owner or operator substitutes alternate financial assurance as specified in Section R315-261-143; or
- (ii) The Director releases the owner or operator from the requirements of Section R315-261-143 in accordance with Subsection R315-261-143(i).

(10) An owner or operator may meet the requirements of Section R315-261-143 by obtaining a written guarantee. The guarantor shall be the direct or higher-tier parent corporation of the owner or operator, a firm whose parent corporation is also the parent corporation of the owner or operator, or a firm with a "substantial business relationship" with the owner or operator. The guarantor shall meet the requirements for owners or operators in Subsections R315-261-143(e)(1) through (8) and shall comply with the terms of the guarantee. The wording of the guarantee shall be identical to the wording specified in Subsection R315-261-151(g)(1). A certified copy of the guarantee shall accompany the items sent to the Director as specified in Subsection R315-261-143(e)(3). One of these items shall be the letter from the guarantor's chief financial officer. If the guarantor's parent corporation is also the parent corporation of the owner or operator, the letter shall describe the value received in consideration of the guarantee. If the guarantor is a firm with a "substantial business relationship" with the owner or operator, this letter shall describe this "substantial business relationship" and the value received in consideration of the guarantee. The terms of the guarantee shall provide that:

(i) Following a determination by the Director that the hazardous secondary materials at the owner or operator's facility covered by this guarantee do not meet the conditions of the exclusion under Subsection R315-261-4(a)(24), the guarantor shall dispose of any hazardous secondary material as hazardous waste and close the facility in accordance with closure requirements found in Rules R315-264 or 265, as applicable, or establish a trust fund as specified in Subsection R315-261-143(a) in the name of the owner or operator in the amount of the current cost estimate.

(ii) The corporate guarantee shall remain in force unless the guarantor sends notice of cancellation by certified mail to the owner or operator and to the Director. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Director, as evidenced by the return receipts.

(iii) If the owner or operator fails to provide alternate financial assurance as specified in Section R315-261-143 and obtain the written approval of such alternate assurance from the Director within 90 days after receipt by both the owner or operator and the Director of a notice of cancellation of the corporate guarantee from the guarantor, the guarantor shall provide such alternate financial assurance in the name of the owner or operator.

(f) Use of multiple financial mechanisms. An owner or operator may satisfy the requirements of Section R315-261-143 by establishing more than one financial mechanism per facility. These mechanisms are limited to trust funds, surety bonds, letters of credit, and insurance. The mechanisms shall be as specified in Subsection R315-261-143(a) through (d), except that it is the combination of mechanisms, rather than the single mechanism, which shall provide financial assurance for an amount at least equal to the current cost estimate. If an owner or

operator uses a trust fund in combination with a surety bond or a letter of credit, he may use the trust fund as the standby trust fund for the other mechanisms. A single standby trust fund may be established for two or more mechanisms. The Director may use any or all of the mechanisms to provide for the facility.

(g) Use of a financial mechanism for multiple facilities. An owner or operator may use a financial assurance mechanism specified in Section R315-261-143 to meet the requirements of Section R315-261-143 for more than one facility. Evidence of financial assurance submitted to the Director shall include a list showing, for each facility, the EPA Identification Number, if any issued; name; address; and the amount of funds assured by the mechanism. In directing funds available through the mechanism for any of the facilities covered by the mechanism, the Director may direct only the amount of funds designated for that facility, unless the owner or operator agrees to the use of additional funds available under the mechanism.

(h) Removal and Decontamination Plan for Release

(1) An owner or operator of a reclamation facility or an intermediate facility who wishes to be released from his financial assurance obligations under Subsection R315-261-4(a)(24)(vi)(F) shall submit a plan for removing all hazardous secondary material residues to the Director at least 180 days prior to the date on which he expects to cease to operate under the exclusion.

(2) The plan shall include, at least:

(A) For each hazardous secondary materials storage unit subject to financial assurance requirements under Subsection R315-261-4(a)(24)(vi)(F), a description of how all excluded hazardous secondary materials shall be recycled or sent for recycling, and how all residues, contaminated containment systems, liners, etc; contaminated soils; subsoils; structures; and equipment shall be removed or decontaminated as necessary to protect human health and the environment, and

(B) A detailed description of the steps necessary to remove or decontaminate all hazardous secondary material residues and contaminated containment system components, equipment, structures, and soils including, but not limited to, procedures for cleaning equipment and removing contaminated soils, methods for sampling and testing surrounding soils, and criteria for determining the extent of decontamination necessary to protect human health and the environment; and

(C) A detailed description of any other activities necessary to protect human health and the environment during this timeframe, including, but not limited to, leachate collection, run-on and run-off control, etc; and

(D) A schedule for conducting the activities described which, at a minimum, includes the total time required to remove all excluded hazardous secondary materials for recycling and decontaminate all units subject to financial assurance under Subsection R315-261-4(a)(24)(vi)(F) and the time required for intervening activities which will allow tracking of the progress of decontamination.

(3) The Director shall provide the owner or operator and the public, through a newspaper notice, the opportunity to submit written comments on the plan and request modifications to the plan no later than 30 days from the date of the notice. He shall also, in response to a request or at his discretion, hold a public hearing whenever such a hearing might clarify one or more issues concerning the plan. The Director shall give public notice of the hearing at least 30 days before it occurs. Public notice of the hearing may be given at the same time as notice of the opportunity for the public to submit written comments, and the two notices may be combined. The Director shall approve, modify, or disapprove the plan within 90 days of its receipt. If the Director does not approve the plan, he shall provide the owner or operator with a detailed written statement of reasons for the refusal and the owner or operator shall modify the plan or submit a new plan for approval within 30 days after receiving

such written statement. The Director shall approve or modify this plan in writing within 60 days. If the Director modifies the plan, this modified plan becomes the approved plan. The Director shall assure that the approved plan is consistent with Subsection R315-261-143(h). A copy of the modified plan with a detailed statement of reasons for the modifications shall be mailed to the owner or operator.

(4) Within 60 days of completion of the activities described for each hazardous secondary materials management unit, the owner or operator shall submit to the Director, by registered mail, a certification that all hazardous secondary materials have been removed from the unit and the unit has been decontaminated in accordance with the specifications in the approved plan. The certification shall be signed by the owner or operator and by a qualified Professional Engineer. Documentation supporting the Professional Engineer's certification shall be furnished to the Director, upon request, until he releases the owner or operator from the financial assurance requirements for Subsection R315-261-4(a)(24)(vi)(F).

(i) Release of the owner or operator from the requirements of Section R315-261-143. Within 60 days after receiving certifications from the owner or operator and a qualified Professional Engineer that all hazardous secondary materials have been removed from the facility or a unit at the facility and the facility or a unit has been decontaminated in accordance with the approved plan as required in Subsection R315-261-143(h), the Director shall notify the owner or operator in writing that he is no longer required under Subsection R315-261-4(a)(24)(vi)(F) to maintain financial assurance for that facility or a unit at the facility, unless the Director has reason to believe that all hazardous secondary materials have not been removed from the facility or unit at a facility or that the facility or unit has not been decontaminated in accordance with the approved plan. The Director shall provide the owner or operator a detailed written statement of any such reason to believe that all hazardous secondary materials have not been removed from the unit or that the unit has not been decontaminated in accordance with the approved plan.

R315-261-147. Financial Requirements for Management of Excluded Hazardous Secondary Materials - Liability Requirements.

(a) Coverage for sudden accidental occurrences. An owner or operator of a hazardous secondary material reclamation facility or an intermediate facility subject to financial assurance requirements under Subsection R315-261-4(a)(24)(vi)(F), or a group of such facilities, shall demonstrate financial responsibility for bodily injury and property damage to third parties caused by sudden accidental occurrences arising from operations of the facility or group of facilities. The owner or operator shall have and maintain liability coverage for sudden accidental occurrences in the amount of at least \$1 million per occurrence with an annual aggregate of at least \$2 million, exclusive of legal defense costs. This liability coverage may be demonstrated as specified in Subsections R315-261-147(a)(1), (2), (3), (4), (5), or (6):

(1) An owner or operator may demonstrate the required liability coverage by having liability insurance as specified in Subsection R315-261-147(a).

(i) Each insurance policy shall be amended by attachment of the Hazardous Secondary Material Facility Liability Endorsement, or evidenced by a Certificate of Liability Insurance. The wording of the endorsement shall be identical to the wording specified in Subsection R315-261-151(h). The wording of the certificate of insurance shall be identical to the wording specified in Subsection R315-261-151(i). The owner or operator shall submit a signed duplicate original of the endorsement or the certificate of insurance to the Director. If

requested by a Director, the owner or operator shall provide a signed duplicate original of the insurance policy.

(ii) Each insurance policy shall be issued by an insurer which, at a minimum, is licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer in Utah.

(2) An owner or operator may meet the requirements of Section R315-261-147 by passing a financial test or using the guarantee for liability coverage as specified in Subsections R315-261-147(f) and (g).

(3) An owner or operator may meet the requirements of Subsection R315-261-147 by obtaining a letter of credit for liability coverage as specified in Subsection R315-261-147(h).

(4) An owner or operator may meet the requirements of Subsection R315-261-147 by obtaining a surety bond for liability coverage as specified in Subsection R315-261-147(i).

(5) An owner or operator may meet the requirements of Subsection R315-261-147 by obtaining a trust fund for liability coverage as specified in Subsection R315-261-147(j).

(6) An owner or operator may demonstrate the required liability coverage through the use of combinations of insurance, financial test, guarantee, letter of credit, surety bond, and trust fund, except that the owner or operator may not combine a financial test covering part of the liability coverage requirement with a guarantee unless the financial statement of the owner or operator is not consolidated with the financial statement of the guarantor. The amounts of coverage demonstrated shall total at least the minimum amounts required by Subsection R315-261-147. If the owner or operator demonstrates the required coverage through the use of a combination of financial assurances under this paragraph, the owner or operator shall specify at least one such assurance as "primary" coverage and shall specify other assurance as "excess" coverage.

(7) An owner or operator shall notify the Director in writing within 30 days whenever:

(i) A claim results in a reduction in the amount of financial assurance for liability coverage provided by a financial instrument authorized in Subsections R315-261-147(a)(1) through (a)(6); or

(ii) A Certification of Valid Claim for bodily injury or property damages caused by a sudden or non-sudden accidental occurrence arising from the operation of a hazardous secondary material reclamation facility or intermediate facility is entered between the owner or operator and third-party claimant for liability coverage under Subsections R315-261-147(a)(1) through (a)(6); or

(iii) A final court order establishing a judgment for bodily injury or property damage caused by a sudden or non-sudden accidental occurrence arising from the operation of a hazardous secondary material reclamation facility or intermediate facility is issued against the owner or operator or an instrument that is providing financial assurance for liability coverage under Subsections R315-261-147(a)(1) through (a)(6).

(b) Coverage for nonsudden accidental occurrences. An owner or operator of a hazardous secondary material reclamation facility or intermediate facility with land-based units, as defined in Section R315-260-10, which are used to manage hazardous secondary materials excluded under Subsection R315-261-4(a)(24) or a group of such facilities, shall demonstrate financial responsibility for bodily injury and property damage to third parties caused by nonsudden accidental occurrences arising from operations of the facility or group of facilities. The owner or operator shall have and maintain liability coverage for nonsudden accidental occurrences in the amount of at least \$3 million per occurrence with an annual aggregate of at least \$6 million, exclusive of legal defense costs. An owner or operator who shall meet the requirements of Section R315-261-147 may combine the required per-occurrence coverage levels for sudden and nonsudden accidental

occurrences into a single per-occurrence level, and combine the required annual aggregate coverage levels for sudden and nonsudden accidental occurrences into a single annual aggregate level. Owners or operators who combine coverage levels for sudden and nonsudden accidental occurrences shall maintain liability coverage in the amount of at least \$4 million per occurrence and \$8 million annual aggregate. This liability coverage may be demonstrated as specified in Subsections R315-261-147(b)(1), (2), (3), (4), (5), or (6):

(1) An owner or operator may demonstrate the required liability coverage by having liability insurance as specified in Subsection R315-261-147.

(i) Each insurance policy shall be amended by attachment of the Hazardous Secondary Material Facility Liability Endorsement or evidenced by a Certificate of Liability Insurance. The wording of the endorsement shall be identical to the wording specified in Subsection R315-261-151(h). The wording of the certificate of insurance shall be identical to the wording specified in Subsection R315-261-151(i). The owner or operator shall submit a signed duplicate original of the endorsement or the certificate of insurance to the Director.

(ii) Each insurance policy shall be issued by an insurer which, at a minimum, is licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer in Utah.

(2) An owner or operator may meet the requirements of Section R315-261-147 by passing a financial test or using the guarantee for liability coverage as specified in Subsections R315-261-147(f) and (g).

(3) An owner or operator may meet the requirements of Subsection R315-261-147 by obtaining a letter of credit for liability coverage as specified in Subsection R315-261-147(h).

(4) An owner or operator may meet the requirements of Section R315-261-147 by obtaining a surety bond for liability coverage as specified in Subsection R315-261-147(i).

(5) An owner or operator may meet the requirements of Subsection R315-261-147 by obtaining a trust fund for liability coverage as specified in Subsection R315-261-147(j).

(6) An owner or operator may demonstrate the required liability coverage through the use of combinations of insurance, financial test, guarantee, letter of credit, surety bond, and trust fund, except that the owner or operator may not combine a financial test covering part of the liability coverage requirement with a guarantee unless the financial statement of the owner or operator is not consolidated with the financial statement of the guarantor. The amounts of coverage demonstrated shall total at least the minimum amounts required by Section R315-261-147. If the owner or operator demonstrates the required coverage through the use of a combination of financial assurances under Subsection R315-261-147(b), the owner or operator shall specify at least one such assurance as "primary" coverage and shall specify other assurance as "excess" coverage.

(7) An owner or operator shall notify the Director in writing within 30 days whenever:

(i) A claim results in a reduction in the amount of financial assurance for liability coverage provided by a financial instrument authorized in Subsections R315-261-147(b)(1) through (b)(6); or

(ii) A Certification of Valid Claim for bodily injury or property damages caused by a sudden or non-sudden accidental occurrence arising from the operation of a hazardous secondary material treatment and/or storage facility is entered between the owner or operator and third-party claimant for liability coverage under Subsection R315-261-147(b)(1) through (b)(6); or

(iii) A final court order establishing a judgment for bodily injury or property damage caused by a sudden or non-sudden accidental occurrence arising from the operation of a hazardous secondary material treatment and/or storage facility is issued against the owner or operator or an instrument that is providing

financial assurance for liability coverage under Subsections R315-261-147(b)(1) through (b)(6).

(c) Request for alternative. If an owner or operator can demonstrate to the satisfaction of the Director that the levels of financial responsibility required by Subsection R315-261-147(a) or (b) are not consistent with the degree and duration of risk associated with treatment and/or storage at the facility or group of facilities, the owner or operator may obtain an alternative financial liability requirement from the Director. The request for an alternative financial liability requirement shall be submitted in writing to the Director. If granted, the alternative financial liability requirement shall take the form of an adjusted level of required liability coverage, such level to be based on the Director's assessment of the degree and duration of risk associated with the ownership or operation of the facility or group of facilities. The Director may require an owner or operator who requests an alternative financial liability requirement to provide such technical and engineering information as is deemed necessary by the Director to determine a level of financial responsibility other than that required by Subsection R315-261-147(a) or (b).

(d) Adjustments by the Director. If the Director determines that the levels of financial responsibility required by Subsections R315-261-147(a) or (b) are not consistent with the degree and duration of risk associated with treatment and/or storage at the facility or group of facilities, the Director may adjust the level of financial responsibility required under Subsections R315-261-147(a) or (b) as may be necessary to protect human health and the environment. This adjusted level shall be based on the Director's assessment of the degree and duration of risk associated with the ownership or operation of the facility or group of facilities. In addition, if the Director determines that there is a significant risk to human health and the environment from nonsudden accidental occurrences resulting from the operations of a facility that is not a surface impoundment, pile, or land treatment facility, he may require that an owner or operator of the facility comply with Subsection R315-261-147(b). An owner or operator shall furnish to the Director, within a reasonable time, any information which the Director requests to determine whether cause exists for such adjustments of level or type of coverage.

(e) Period of coverage. Within 60 days after receiving certifications from the owner or operator and a qualified Professional Engineer that all hazardous secondary materials have been removed from the facility or a unit at the facility and the facility or a unit has been decontaminated in accordance with the approved plan per Subsection R315-261-143(h), the Director shall notify the owner or operator in writing that he is no longer required under Subsection R315-261-4(a)(24)(vi)(F) to maintain liability coverage for that facility or a unit at the facility, unless the Director has reason to believe that all hazardous secondary materials have not been removed from the facility or unit at a facility or that the facility or unit has not been decontaminated in accordance with the approved plan.

(f) Financial test for liability coverage.

(1) An owner or operator may satisfy the requirements of Section R315-261-147 by demonstrating that he passes a financial test as specified in this paragraph. To pass this test the owner or operator shall meet the criteria of Subsections R315-261-147(f)(1)(i) or (ii):

(i) The owner or operator shall have:

(A) Net working capital and tangible net worth each at least six times the amount of liability coverage to be demonstrated by this test; and

(B) Tangible net worth of at least \$10 million; and

(C) Assets in the United States amounting to either:

(I) At least 90 percent of his total assets; or

(II) at least six times the amount of liability coverage to be demonstrated by this test.

(ii) The owner or operator shall have:

(A) A current rating for his most recent bond issuance of AAA, AA, A, or BBB as issued by Standard and Poor's, or Aaa, Aa, A, or Baa as issued by Moody's; and

(B) Tangible net worth of at least \$10 million; and

(C) Tangible net worth at least six times the amount of liability coverage to be demonstrated by this test; and

(D) Assets in the United States amounting to either:

(I) At least 90 percent of his total assets; or

(II) at least six times the amount of liability coverage to be demonstrated by this test.

(2) The phrase "amount of liability coverage" as used in Subsection R315-261-147(f)(1) refers to the annual aggregate amounts for which coverage is required under Subsections R315-261-147(a) and (b) and the annual aggregate amounts for which coverage is required under Subsections R315-264-147(a) and (b) and 40 CFR 265.147(a) and (b), which are adopted by reference.

(3) To demonstrate that he meets this test, the owner or operator shall submit the following three items to the Director:

(i) A letter signed by the owner's or operator's chief financial officer and worded as specified in Subsection R315-261-151(f). If an owner or operator is using the financial test to demonstrate both assurance as specified by Subsection R315-261-143(e), and liability coverage, he shall submit the letter specified in Subsection R315-261-151(f) to cover both forms of financial responsibility; a separate letter as specified in Subsection R315-261-151(e) is not required.

(ii) A copy of the independent certified public accountant's report on examination of the owner's or operator's financial statements for the latest completed fiscal year.

(iii) If the chief financial officer's letter providing evidence of financial assurance includes financial data showing that the owner or operator satisfies Subsection R315-261-147(f)(1)(i) that are different from the data in the audited financial statements referred to in Subsection R315-261-147(f)(3)(ii) or any other audited financial statement or data filed with the SEC, then a special report from the owner's or operator's independent certified public accountant to the owner or operator is required. The special report shall be based upon an agreed upon procedures engagement in accordance with professional auditing standards and shall describe the procedures performed in comparing the data in the chief financial officer's letter derived from the independently audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements, the findings of the comparison, and the reasons for any difference.

(4) The owner or operator may obtain a one-time extension of the time allowed for submission of the documents specified in Subsection R315-261-147(f)(3) if the fiscal year of the owner or operator ends during the 90 days prior to the effective date of these regulations and if the year-end financial statements for that fiscal year shall be audited by an independent certified public accountant. The extension shall end no later than 90 days after the end of the owner's or operator's fiscal year. To obtain the extension, the owner's or operator's chief financial officer shall send, by the effective date of these regulations, a letter to the Director. This letter from the chief financial officer shall:

(i) Request the extension;

(ii) Certify that he has grounds to believe that the owner or operator meets the criteria of the financial test;

(iii) Specify for each facility to be covered by the test the EPA Identification Number, name, address, the amount of liability coverage and, when applicable, current closure and post-closure cost estimates to be covered by the test;

(iv) Specify the date ending the owner's or operator's last complete fiscal year before the effective date of these regulations;

(v) Specify the date, no later than 90 days after the end of such fiscal year, when he will submit the documents specified in Subsection R315-261-147(f)(3); and

(vi) Certify that the year-end financial statements of the owner or operator for such fiscal year will be audited by an independent certified public accountant.

(5) After the initial submission of items specified in Subsection R315-261-147(f)(3), the owner or operator shall send updated information to the Director within 90 days after the close of each succeeding fiscal year. This information shall consist of all three items specified in Subsection R315-261-147(f)(3).

(6) If the owner or operator no longer meets the requirements of Subsection R315-261-147(f)(1), he shall obtain insurance, a letter of credit, a surety bond, a trust fund, or a guarantee for the entire amount of required liability coverage as specified in Section R315-261-147. Evidence of liability coverage shall be submitted to the Director within 90 days after the end of the fiscal year for which the year-end financial data show that the owner or operator no longer meets the test requirements.

(7) The Director may disallow use of this test on the basis of qualifications in the opinion expressed by the independent certified public accountant in his report on examination of the owner's or operator's financial statements, see Subsection R315-261-147(f)(3)(ii). An adverse opinion or a disclaimer of opinion shall be cause for disallowance. The Director shall evaluate other qualifications on an individual basis. The owner or operator shall provide evidence of insurance for the entire amount of required liability coverage as specified in Section R315-261-147 within 30 days after notification of disallowance.

(g) Guarantee for liability coverage.

(1) Subject to Subsection R315-261-147(g)(2), an owner or operator may meet the requirements of Section R315-261-147 by obtaining a written guarantee, hereinafter referred to as "guarantee." The guarantor shall be the direct or higher-tier parent corporation of the owner or operator, a firm whose parent corporation is also the parent corporation of the owner or operator, or a firm with a "substantial business relationship" with the owner or operator. The guarantor shall meet the requirements for owners or operators in Subsection R315-261-147(f)(1) through (f)(6). The wording of the guarantee shall be identical to the wording specified in Subsection R315-261-151(g)(2). A certified copy of the guarantee shall accompany the items sent to the Director as specified in Subsection R315-261-147(f)(3). One of these items shall be the letter from the guarantor's chief financial officer. If the guarantor's parent corporation is also the parent corporation of the owner or operator, this letter shall describe the value received in consideration of the guarantee. If the guarantor is a firm with a "substantial business relationship" with the owner or operator, this letter shall describe this "substantial business relationship" and the value received in consideration of the guarantee.

(i) If the owner or operator fails to satisfy a judgment based on a determination of liability for bodily injury or property damage to third parties caused by sudden or nonsudden accidental occurrences, or both as the case may be, arising from the operation of facilities covered by this corporate guarantee, or fails to pay an amount agreed to in settlement of claims arising from or alleged to arise from such injury or damage, the guarantor shall do so up to the limits of coverage.

(2)(i) In the case of corporations incorporated outside the United States, a guarantee may be used to satisfy the requirements of Section R315-261-147 only if the non-U.S. corporation has identified a registered agent for service of process in Utah.

(h) Letter of credit for liability coverage.

(1) An owner or operator may satisfy the requirements of Section R315-261-147 by obtaining an irrevocable standby

letter of credit that conforms to the requirements of Subsection R315-261-147(h) and submits a copy of the letter of credit to the Director.

(2) The financial institution issuing the letter of credit shall be an entity that has the authority to issue letters of credit and whose letter of credit operations are regulated and examined by a Federal or Utah agency.

(3) The wording of the letter of credit shall be identical to the wording specified in Subsection R315-261-151(j).

(4) An owner or operator who uses a letter of credit to satisfy the requirements of Section R315-261-147 may also establish a standby trust fund. Under the terms of such a letter of credit, all amounts paid pursuant to a draft by the trustee of the standby trust shall be deposited by the issuing institution into the standby trust in accordance with instructions from the trustee. The trustee of the standby trust fund shall be an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a Federal or Utah agency.

(5) The wording of the standby trust fund shall be identical to the wording specified in Subsection R315-261-151(m).

(i) Surety bond for liability coverage.

(1) An owner or operator may satisfy the requirements of Section R315-261-147 by obtaining a surety bond that conforms to the requirements of Subsection R315-261-147(i) and submitting a copy of the bond to the Director.

(2) The surety company issuing the bond shall be among those listed as acceptable sureties on Federal bonds in the most recent Circular 570 of the U.S. Department of the Treasury.

(3) The wording of the surety bond shall be identical to the wording specified in Subsection R315-261-151(k).

(j) Trust fund for liability coverage.

(1) An owner or operator may satisfy the requirements of Section R315-261-147 by establishing a trust fund that conforms to the requirements of Subsection R315-261-147(j) and submitting an originally signed duplicate of the trust agreement to the Director.

(2) The trustee shall be an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a Federal or Utah agency.

(3) The trust fund for liability coverage shall be funded for the full amount of the liability coverage to be provided by the trust fund before it may be relied upon to satisfy the requirements of Section R315-261-147. If at any time after the trust fund is created the amount of funds in the trust fund is reduced below the full amount of the liability coverage to be provided, the owner or operator, by the anniversary date of the establishment of the Fund, shall either add sufficient funds to the trust fund to cause its value to equal the full amount of liability coverage to be provided, or obtain other financial assurance as specified in Section R315-261-147 to cover the difference. For purposes of Subsection R315-261-147(j), "the full amount of the liability coverage to be provided" means the amount of coverage for sudden and/or nonsudden occurrences required to be provided by the owner or operator by Section R315-261-147, less the amount of financial assurance for liability coverage that is being provided by other financial assurance mechanisms being used to demonstrate financial assurance by the owner or operator.

(4) The wording of the trust fund shall be identical to the wording specified in Subsection R315-261-151(l).

R315-261-148. Financial Requirements for Management of Excluded Hazardous Secondary Materials - Incapacity of Owners or Operators, Guarantors, or Financial Institutions.

(a) An owner or operator shall notify the Director by certified mail of the commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming the owner or operator as debtor, within 10 days after

commencement of the proceeding. A guarantor of a corporate guarantee as specified in Subsection R315-261-143(e) shall make such a notification if he is named as debtor, as required under the terms of the corporate guarantee.

(b) An owner or operator who fulfills the requirements of Sections R315-261-143 or R315-261-147 by obtaining a trust fund, surety bond, letter of credit, or insurance policy shall be deemed to be without the required financial assurance or liability coverage in the event of bankruptcy of the trustee or issuing institution, or a suspension or revocation of the authority of the trustee institution to act as trustee or of the institution issuing the surety bond, letter of credit, or insurance policy to issue such instruments. The owner or operator shall establish other financial assurance or liability coverage within 60 days after such an event.

R315-261-151. Financial Requirements for Management of Excluded Hazardous Secondary Materials -- Wording of the Instruments.

(a)(1) A trust agreement for a trust fund, as specified in Subsection R315-261-143(a) shall be worded as follows, except that instructions in parentheses are to be replaced with the relevant information and the parentheses deleted:

Trust Agreement

Trust Agreement, the "Agreement," entered into as of (date) by and between (name of the owner or operator), a (name of State) (insert "corporation," "partnership," "association," or "proprietorship"), the "Grantor," and (name of corporate trustee), (insert "incorporated in the State of _____" or "a national bank"), the "Trustee."

Whereas, the Utah Waste Management and Radiation Control Board of the State of Utah, (the "BOARD") has established certain regulations applicable to the Grantor, requiring that an owner or operator of a facility regulated under Rules R315-264, or 265, or satisfying the conditions of the exclusion under Subsection R315-261-4(a)(24) shall provide assurance that funds shall be available if needed for care of the facility under Sections R315-264-110 through 120 or 40 CFR 265.110 through 121, which are adopted by reference; as applicable,

Whereas, the Grantor has elected to establish a trust to provide all or part of such financial assurance for the facilities identified herein,

Whereas, the Grantor, acting through its duly authorized officers, has selected the Trustee to be the trustee under this agreement, and the Trustee is willing to act as trustee,

Now, Therefore, the Grantor and the Trustee agree as follows:

Section 1. Definitions. As used in this Agreement:

(a) The term "Grantor" means the owner or operator who enters into this Agreement and any successors or assigns of the Grantor.

(b) The term "Trustee" means the Trustee who enters into this Agreement and any successor Trustee.

(c) The term "BOARD", "Waste Management and Radiation Control Board" created pursuant to Utah Code Annotated 19-1-106.

(d) The term "DIRECTOR" means the Director, Division of Waste Management and Radiation Control his successors, designees, and any subsequent entity of the State of Utah upon whom the duties of regulation and enforcement of regulations governing hazardous waste.

Section 2. Identification of Facilities and Cost Estimates. This Agreement pertains to the facilities and cost estimates identified on attached Schedule A (on Schedule A, for each facility list the EPA Identification Number, if available; name; address; and the current cost estimates, or portions thereof; for which financial assurance is demonstrated by this Agreement).

Section 3. Establishment of Fund. The Grantor and the

Trustee hereby establish a trust fund, the "Fund," for the benefit of the Director in the event that the hazardous secondary materials of the grantor no longer meet the conditions of the exclusion under Subsection R315-261-4(a)(24). The Grantor and the Trustee intend that no third party have access to the Fund except as herein provided. The Fund is established initially as consisting of the property, which is acceptable to the Trustee, described in Schedule B attached hereto. Such property and any other property subsequently transferred to the Trustee is referred to as the Fund, together with all earnings and profits thereon, less any payments or distributions made by the Trustee pursuant to this Agreement. The Fund shall be held by the Trustee, IN TRUST, as hereinafter provided. The Trustee shall not be responsible nor shall it undertake any responsibility for the amount or adequacy of, nor any duty to collect from the Grantor, any payments necessary to discharge any liabilities of the Grantor established by Director.

Section 4. Payments from the Fund. The Trustee shall make payments from the Fund as the Director shall direct, in writing, to provide for the payment of the costs of the performance of activities required under Sections R315-264-110 through 120 or 40 CFR 265.110 through 121, which are adopted by reference, for the facilities covered by this Agreement. The Trustee shall reimburse the Grantor or other persons as specified by the Director from the Fund for expenditures for such activities in such amounts as the beneficiary shall direct in writing. In addition, the Trustee shall refund to the Grantor such amounts as the Director specifies in writing. Upon refund, such funds shall no longer constitute part of the Fund as defined herein.

Section 5. Payments Comprising the Fund. Payments made to the Trustee for the Fund shall consist of cash or securities acceptable to the Trustee.

Section 6. Trustee Management. The Trustee shall invest and reinvest the principal and income of the Fund and keep the Fund invested as a single fund, without distinction between principal and income, in accordance with general investment policies and guidelines which the Grantor may communicate in writing to the Trustee from time to time, subject, however, to the provisions of this section. In investing, reinvesting, exchanging, selling, and managing the Fund, the Trustee shall discharge his duties with respect to the trust fund solely in the interest of the beneficiary and with the care, skill, prudence, and diligence under the circumstances then prevailing which persons of prudence, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and with like aims; except that:

(i) Securities or other obligations of the Grantor, or any other owner or operator of the facilities, or any of their affiliates as defined in the Investment Company Act of 1940, as amended, 15 U.S.C. 80a-2.(a), shall not be acquired or held, unless they are securities or other obligations of the Federal or a State government;

(ii) The Trustee is authorized to invest the Fund in time or demand deposits of the Trustee, to the extent insured by an agency of the Federal or State government; and

(iii) The Trustee is authorized to hold cash awaiting investment or distribution uninvested for a reasonable time and without liability for the payment of interest thereon.

Section 7. Commingling and Investment. The Trustee is expressly authorized in its discretion:

(a) To transfer from time to time any or all of the assets of the Fund to any common, commingled, or collective trust fund created by the Trustee in which the Fund is eligible to participate, subject to all of the provisions thereof, to be commingled with the assets of other trusts participating therein; and

(b) To purchase shares in any investment company registered under the Investment Company Act of 1940, 15

U.S.C. 80a-1 et seq., including one which may be created, managed, underwritten, or to which investment advice is rendered or the shares of which are sold by the Trustee. The Trustee may vote such shares in its discretion.

Section 8. Express Powers of Trustee. Without in any way limiting the powers and discretions conferred upon the Trustee by the other provisions of this Agreement or by law, the Trustee is expressly authorized and empowered:

(a) To sell, exchange, convey, transfer, or otherwise dispose of any property held by it, by public or private sale. No person dealing with the Trustee shall be bound to see to the application of the purchase money or to inquire into the validity or expediency of any such sale or other disposition;

(b) To make, execute, acknowledge, and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted;

(c) To register any securities held in the Fund in its own name or in the name of a nominee and to hold any security in bearer form or in book entry, or to combine certificates representing such securities with certificates of the same issue held by the Trustee in other fiduciary capacities, or to deposit or arrange for the deposit of such securities in a qualified central depository even though, when so deposited, such securities may be merged and held in bulk in the name of the nominee of such depository with other securities deposited therein by another person, or to deposit or arrange for the deposit of any securities issued by the United States Government, or any agency or instrumentality thereof, with a Federal Reserve bank, but the books and records of the Trustee shall at all times show that all such securities are part of the Fund;

(d) To deposit any cash in the Fund in interest-bearing accounts maintained or savings certificates issued by the Trustee, in its separate corporate capacity, or in any other banking institution affiliated with the Trustee, to the extent insured by an agency of the Federal or State government; and

(e) To compromise or otherwise adjust all claims in favor of or against the Fund.

Section 9. Taxes and Expenses. All taxes of any kind that may be assessed or levied against or in respect of the Fund and all brokerage commissions incurred by the Fund shall be paid from the Fund. All other expenses incurred by the Trustee in connection with the administration of this Trust, including fees for legal services rendered to the Trustee, the compensation of the Trustee to the extent not paid directly by the Grantor, and all other proper charges and disbursements of the Trustee shall be paid from the Fund.

Section 10. Annual Valuation. The Trustee shall annually, at least 30 days prior to the anniversary date of establishment of the Fund, furnish to the Grantor and to the Director a statement confirming the value of the Trust. Any securities in the Fund shall be valued at market value as of no more than 60 days prior to the anniversary date of establishment of the Fund. The failure of the Grantor to object in writing to the Trustee within 90 days after the statement has been furnished to the Grantor and the Director shall constitute a conclusively binding assent by the Grantor, barring the Grantor from asserting any claim or liability against the Trustee with respect to matters disclosed in the statement.

Section 11. Advice of Counsel. The Trustee may from time to time consult with counsel, who may be counsel to the Grantor, with respect to any question arising as to the construction of this Agreement or any action to be taken hereunder. The Trustee shall be fully protected, to the extent permitted by law, in acting upon the advice of counsel.

Section 12. Trustee Compensation. The Trustee shall be entitled to reasonable compensation for its services as agreed upon in writing from time to time with the Grantor.

Section 13. Successor Trustee. The Trustee may resign or

the Grantor may replace the Trustee, but such resignation or replacement shall not be effective until the Grantor has appointed a successor trustee and this successor accepts the appointment. The successor trustee shall have the same powers and duties as those conferred upon the Trustee hereunder. Upon the successor trustee's acceptance of the appointment, the Trustee shall assign, transfer, and pay over to the successor trustee the funds and properties then constituting the Fund. If for any reason the Grantor cannot or does not act in the event of the resignation of the Trustee, the Trustee may apply to a court of competent jurisdiction for the appointment of a successor trustee or for instructions. The successor trustee shall specify the date on which it assumes administration of the trust in a writing sent to the Grantor, the Director, and the present Trustee by certified mail 10 days before such change becomes effective. Any expenses incurred by the Trustee as a result of any of the acts contemplated by this Section shall be paid as provided in Section 9.

Section 14. Instructions to the Trustee. All orders, requests, and instructions by the Grantor to the Trustee shall be in writing, signed by such persons as are designated in the attached Exhibit A or such other designees as the Grantor may designate by amendment to Exhibit A. The Trustee shall be fully protected in acting without inquiry in accordance with the Grantor's orders, requests, and instructions. All orders, requests, and instructions by the Director to the Trustee shall be in writing, signed by the Director, and the Trustee shall act and shall be fully protected in acting in accordance with such orders, requests, and instructions. The Trustee shall have the right to assume, in the absence of written notice to the contrary, that no event constituting a change or a termination of the authority of any person to act on behalf of the Grantor or the Director hereunder has occurred. The Trustee shall have no duty to act in the absence of such orders, requests, and instructions from the Grantor and/or the Director, except as provided for herein.

Section 15. Amendment of Agreement. This Agreement may be amended by an instrument in writing executed by the Grantor, the Trustee, and the Director, or by the Trustee and the Director if the Grantor ceases to exist.

Section 16. Irrevocability and Termination. Subject to the right of the parties to amend this Agreement as provided in Section 16, this Trust shall be irrevocable and shall continue until terminated at the written agreement of the Grantor, the Trustee, and the Director, or by the Trustee and the Director, if the Grantor ceases to exist. Upon termination of the Trust, all remaining trust property, less final trust administration expenses, shall be delivered to the Grantor.

Section 17. Immunity and Indemnification. The Trustee shall not incur personal liability of any nature in connection with any act or omission, made in good faith, in the administration of this Trust, or in carrying out any directions by the Grantor or the Director issued in accordance with this Agreement. The Trustee shall be indemnified and saved harmless by the Grantor or from the Trust Fund, or both, from and against any personal liability to which the Trustee may be subjected by reason of any act or conduct in its official capacity, including all expenses reasonably incurred in its defense in the event the Grantor fails to provide such defense.

Section 18. Choice of Law. This Agreement shall be administered, construed, and enforced according to the laws of the State of (insert name of State).

Section 19. Interpretation. As used in this Agreement, words in the singular include the plural and words in the plural include the singular. The descriptive headings for each Section of this Agreement shall not affect the interpretation or the legal efficacy of this Agreement.

In Witness Whereof the parties have caused this Agreement to be executed by their respective officers duly authorized and their corporate seals to be hereunto affixed and attested as of the

date first above written: The parties below certify that the wording of this Agreement is identical to the wording specified in Subsection R315-261-151(a)(1) as such regulations were constituted on the date first above written.

(Signature of Grantor)
 (Title)
 Attest:
 (Title)
 (Seal)
 (Signature of Trustee)
 Attest:
 (Title)
 (Seal)

(2) The following is an example of the certification of acknowledgment which shall accompany the trust agreement for a trust fund as specified in Subsection R315-261-143(a). State of Utah requirements may differ on the proper content of this acknowledgment.

State of County of On this (date), before me personally came (owner or operator) to me known, who, being by me duly sworn, did depose and say that she/he resides at (address), that she/he is (title) of (corporation), the corporation described in and which executed the above instrument; that she/he knows the seal of said corporation; that the seal affixed to such instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation, and that she/he signed her/his name thereto by like order.

(Signature of Notary Public)

(b) A surety bond guaranteeing payment into a trust fund, as specified in Subsection R315-261-143(b), shall be worded as follows, except that instructions in parentheses are to be replaced with the relevant information and the parentheses deleted:

Financial Guarantee Bond
 Date bond executed:
 Effective date:
 Principal: (legal name and business address of owner or operator)
 Type of Organization: (insert "individual," "joint venture," "partnership," or "corporation")
 State of incorporation:
 Surety(ies): (name(s) and business address(es))
 EPA and State Identification Numbers, name, address and amount(s) for each facility guaranteed by this bond:
 Total penal sum of bond: \$
 Surety's bond number:

Know All Persons By These Presents, That we, the Principal and Surety(ies) are firmly bound to the Director of the Division of Waste management and Radiation Control of the State of Utah (hereinafter called the Director) in the event that the hazardous secondary materials at the reclamation or intermediate facility listed below no longer meet the conditions of the exclusion under Subsection R315-261-4(a)(24), in the above penal sum for the payment of which we bind ourselves, our heirs, executors, administrators, successors, and assigns jointly and severally; provided that, where the Surety(ies) are corporations acting as co-sureties, we, the Sureties, bind ourselves in such sum "jointly and severally" only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each Surety binds itself, jointly and severally with the Principal, for the payment of such sum only as is set forth opposite the name of such Surety, but if no limit of liability is indicated, the limit of liability shall be the full amount of the penal sum.

Whereas said Principal is required, under the Utah Solid and Hazardous Waste Act as amended, to have a permit or interim status in order to own or operate each facility identified above, or to meet conditions under Subsection R315-261-4(a)(24), and

Whereas said Principal is required to provide financial assurance as a condition of permit or interim status or as a condition of an exclusion under Subsection R315-261-4(a)(24) and

Whereas said Principal shall establish a standby trust fund as is required when a surety bond is used to provide such financial assurance;

Now, Therefore, the conditions of the obligation are such that if the Principal shall faithfully, before the beginning of final closure of each facility identified above, fund the standby trust fund in the amount(s) identified above for the facility,

Or, if the Principal shall satisfy all the conditions established for exclusion of hazardous secondary materials from coverage as solid waste under Subsection R315-261-4(a)(24),

Or, if the Principal shall fund the standby trust fund in such amount(s) within 15 days after a final order to begin closure is issued by the Director or a U.S. district court or other court of competent jurisdiction,

Or, if the Principal shall provide alternate financial assurance, as specified in Sections R315-261-140 through 143 and R315-261-147 through 151, as applicable, and obtain the Director's written approval of such assurance, within 90 days after the date notice of cancellation is received by both the Principal and the Director from the Surety(ies), then this obligation shall be null and void; otherwise it is to remain in full force and effect.

The Surety(ies) shall become liable on this bond obligation only when the Principal has failed to fulfill the conditions described above. Upon notification by the Director that the Principal has failed to perform as guaranteed by this bond, the Surety(ies) shall place funds in the amount guaranteed for the facility(ies) into the standby trust fund as directed by the Director.

The liability of the Surety(ies) shall not be discharged by any payment or succession of payments hereunder, unless and until such payment or payments shall amount in the aggregate to the penal sum of the bond, but in no event shall the obligation of the Surety(ies) hereunder exceed the amount of said penal sum.

The Surety(ies) may cancel the bond by sending notice of cancellation by certified mail to the Principal and to the Director, provided, however, that cancellation shall not occur during the 120 days beginning on the date of receipt of the notice of cancellation by both the Principal and the Director, as evidenced by the return receipts.

The Principal may terminate this bond by sending written notice to the Surety(ies), provided, however, that no such notice shall become effective until the Surety(ies) receive(s) written authorization for termination of the bond by the Director.

(The following paragraph is an optional rider that may be included but is not required.)

Principal and Surety(ies) hereby agree to adjust the penal sum of the bond yearly so that it guarantees a new amount, provided that the penal sum does not increase by more than 20 percent in any one year, and no decrease in the penal sum takes place without the written permission of the Director.

In Witness Whereof, the Principal and Surety(ies) have executed this Financial Guarantee Bond and have affixed their seals on the date set forth above.

The persons whose signatures appear below hereby certify that they are authorized to execute this surety bond on behalf of the Principal and Surety(ies) and that the wording of this surety bond is identical to the wording specified in Subsection R315-261-151(b) as such regulations were constituted on the date this bond was executed.

Principal
 (Signature(s))
 (Name(s))
 (Title(s))

(Corporate seal)Corporate Surety(ies)
(Name and address)

State of incorporation:Liability limit:

\$(Signature(s))

(Name(s) and title(s))

(Corporate seal)

(For every co-surety, provide signature(s), corporate seal,
and other information in the same manner as for Surety above.)

Bond premium: \$

(c) A letter of credit, as specified in Subsection R315-261-143(c), shall be worded as follows, except that instructions in parentheses are to be replaced with the relevant information and the parentheses deleted:

Irrevocable Standby Letter of Credit

(Director name), Director,

Division of Waste Management and Radiation Control

195 North 1950 West

P.O Box 144880

Salt Lake City, Utah 84114-4880

Dear Director: We hereby establish our Irrevocable Standby Letter of Credit No. _____ in your favor, in the event that the hazardous secondary materials at the covered reclamation or intermediary facility(ies) no longer meet the conditions of the exclusion under Subsection R315-261-4(a)(24), at the request and for the account of (owner's or operator's name and address) up to the aggregate amount of (in words) U.S. dollars \$____, available upon presentation of

(1) your sight draft, bearing reference to this letter of credit No. _____, and

(2) your signed statement reading as follows: "I certify that the amount of the draft is payable pursuant to regulations issued under authority of the Utah Solid and Hazardous Waste Act as amended."

This letter of credit is effective as of (date) and shall expire on (date at least 1 year later), but such expiration date shall be automatically extended for a period of (at least 1 year) on (date) and on each successive expiration date, unless, at least 120 days before the current expiration date, we notify both you, the Director, and (owner's or operator's name) by certified mail that we have decided not to extend this letter of credit beyond the current expiration date. In the event you are so notified, any unused portion of the credit shall be available upon presentation of your sight draft for 120 days after the date of receipt by both you and (owner's or operator's name), as shown on the signed return receipts.

Whenever this letter of credit is drawn on under and in compliance with the terms of this credit, we shall duly honor such draft upon presentation to us, and we shall deposit the amount of the draft directly into the standby trust fund of (owner's or operator's name) in accordance with your instructions.

We certify that the wording of this letter of credit is identical to the wording specified in Subsection R315-261-151(c) as such regulations were constituted on the date shown immediately below.

(Signature(s) and title(s) of official(s) of issuing institution)

(Date)

This credit is subject to (insert "the most recent edition of the Uniform Customs and Practice for Documentary Credits, published and copyrighted by the International Chamber of Commerce," or "the Uniform Commercial Code").

(d) A certificate of insurance, as specified in Subsection R315-261-143(d), shall be worded as follows, except that instructions in parentheses are to be replaced with the relevant information and the parentheses deleted:

Certificate of Insurance

Name and Address of Insurer (herein called the "Insurer"):

Name and Address of Insured (herein called the "Insured"):

Facilities Covered: (List for each facility: The EPA and

State Identification Numbers (if any issued), name, address, and the amount of insurance for all facilities covered, which shall total the face amount shown below.)

Face Amount:

Policy Number:

Effective Date:

The Insurer hereby certifies that it has issued to the Insured the policy of insurance identified above to provide financial assurance so that in accordance with applicable regulations all hazardous secondary materials can be removed from the facility or any unit at the facility and the facility or any unit at the facility can be decontaminated at the facilities identified above. The Insurer further warrants that such policy conforms in all respects with the requirements of Subsection R315-261-143(d) as applicable and as such regulations were constituted on the date shown immediately below. It is agreed that any provision of the policy inconsistent with such regulations is hereby amended to eliminate such inconsistency.

Whenever requested by the Director of the Division of Waste Management and Radiation Control, the Insurer agrees to furnish to the Director a duplicate original of the policy listed above, including all endorsements thereon.

I hereby certify that the wording of this certificate is identical to the wording specified in Subsection R315-261-151(d) such regulations were constituted on the date shown immediately below.

(Authorized signature for Insurer)

(Name of person signing)

(Title of person signing)

Signature of witness or notary:(Date)

(e) A letter from the chief financial officer, as specified in Subsection R315-261-143(e), shall be worded as follows, except that instructions in parentheses are to be replaced with the relevant information and the parentheses deleted:

Letter From Chief Financial Officer

Director

Division of Waste Management and Radiation Control

195 North 1950 West

P.O. Box 144880

Salt Lake City, UT 84114-4880

I am the chief financial officer of (name and address of firm). This letter is in support of this firm's use of the financial test to demonstrate financial assurance, as specified in Sections R315-261-140 through 143 and R315-261-147 through 151.

(Fill out the following nine paragraphs regarding facilities and associated cost estimates. If your firm has no facilities that belong in a particular paragraph, write "None" in the space indicated. For each facility, include its EPA and State Identification Numbers (if any issued), name, address, and current cost estimates.)

1. This firm is the owner or operator of the following facilities for which financial assurance is demonstrated through the financial test specified in Sections R315-261-140 through 143 and R315-261-147 through 151. The current cost estimates covered by the test are shown for each facility: _____.

2. This firm guarantees, through the guarantee specified in Sections R315-261-140 through 143 and R315-261-147 through 151, the following facilities owned or operated by the guaranteed party. The current cost estimates so guaranteed are shown for each facility: _____. The firm identified above is (insert one or more: (1) The direct or higher-tier parent corporation of the owner or operator; (2) owned by the same parent corporation as the parent corporation of the owner or operator, and receiving the following value in consideration of this guarantee _____, or (3) engaged in the following substantial business relationship with the owner or operator _____, and receiving the following value in consideration of this guarantee _____. (Attach a written description of the business relationship or a copy of the contract establishing such

relationship to this letter).

3. In all other states this firm, as owner or operator or guarantor, is demonstrating financial assurance for the following facilities through the use of a test equivalent or substantially equivalent to the financial test specified in Sections R315-261-140 through 143 and R315-261-147 through 151. The current cost estimates covered by such a test are shown for each facility: _____.

4. This firm is the owner or operator of the following hazardous secondary materials management facilities for which financial assurance is not demonstrated either to EPA or a State through the financial test or any other financial assurance mechanism specified in Sections R315-261-140 through 143 and R315-261-147 through 151 or equivalent or substantially equivalent State mechanisms. The current cost estimates not covered by such financial assurance are shown for each facility: _____.

5. This firm is the owner or operator of the following UIC facilities for which financial assurance for plugging and abandonment is required under 40 CFR 144. The current closure cost estimates as required by 40 CFR 144.62 are shown for each facility: _____.

6. This firm is the owner or operator of the following facilities for which financial assurance for closure or post-closure care is demonstrated through the financial test specified in Sections R315-264-140 through 151 or 40 CFR 265.140 through 150, which are adopted by reference. The current closure and/or post-closure cost estimates covered by the test are shown for each facility: _____.

7. This firm guarantees, through the guarantee specified in Sections R315-264-140 through 151 or 40 CFR 265.140 through 150, which are adopted by reference; the closure or post-closure care of the following facilities owned or operated by the guaranteed party. The current cost estimates for the closure or post-closure care so guaranteed are shown for each facility: _____. The firm identified above is (insert one or more: (1) The direct or higher-tier parent corporation of the owner or operator; (2) owned by the same parent corporation as the parent corporation of the owner or operator, and receiving the following value in consideration of this guarantee ____; or (3) engaged in the following substantial business relationship with the owner or operator ____, and receiving the following value in consideration of this guarantee ____). (Attach a written description of the business relationship or a copy of the contract establishing such relationship to this letter).

8. In other jurisdictions and states where the Director is not authorized to administer the financial requirements of R315-264-140 through 151 or 40 CFR 265.140 through 150, which are adopted by reference, this firm, as owner or operator or guarantor, is demonstrating financial assurance for the closure or post-closure care of the following facilities through the use of a test equivalent or substantially equivalent to the financial test specified in Sections R315-264-140 through 151 or 40 CFR 265.140 through 150, which are adopted by reference. The current closure and/or post-closure cost estimates covered by such a test are shown for each facility: _____.

9. This firm is the owner or operator of the following hazardous waste management facilities for which financial assurance for closure or, if a disposal facility, post-closure care, is not demonstrated either to EPA or a State through the financial test or any other financial assurance mechanism specified in Sections R315-264-140 through 151 or 40 CFR 265.140 through 150, which are adopted by reference, or equivalent or substantially equivalent State mechanisms. The current closure and/or post-closure cost estimates not covered by such financial assurance are shown for each facility: _____.

This firm (insert "is required" or "is not required") to file a Form 10K with the Securities and Exchange Commission (SEC) for the latest fiscal year.

The fiscal year of this firm ends on (month, day). The figures for the following items marked with an asterisk are derived from this firm's independently audited, year-end financial statements for the latest completed fiscal year, ended (date).

(Fill in Alternative I if the criteria of Subsection R315-261-143(e)(1)(i) are used. Fill in Alternative II if the criteria of Subsection R315-261-143(e)(1)(ii) are used.)

Alternative I

1. Sum of current cost estimates (total of all cost estimates shown in the nine paragraphs above) \$ _____

*2. Total liabilities (if any portion of the cost estimates is included in total liabilities, you may deduct the amount of that portion from this line and add that amount to lines 3 and 4) \$ _____

*3. Tangible net worth \$ _____

*4. Net worth \$ _____ -

*5. Current assets \$ _____

*6. Current liabilities \$ _____

7. Net working capital (line 5 minus line 6) \$ _____

*8. The sum of net income plus depreciation, depletion, and amortization \$ _____ -

*9. Total assets in U.S. (required only if less than 90% of firm's assets are located in the U.S.) \$ _____ -

10. Is line 3 at least \$10 million? (Yes/No) _____

11. Is line 3 at least 6 times line 1? (Yes/No) _____ -

12. Is line 7 at least 6 times line 1? (Yes/No) _____ -

*13. Are at least 90% of firm's assets located in the U.S.? If not, complete line 14 (Yes/No) _____

14. Is line 9 at least 6 times line 1? (Yes/No) _____ -

_____- 15. Is line 2 divided by line 4 less than 2.0? (Yes/No) _____

_____- 16. Is line 8 divided by line 2 greater than 0.1? (Yes/No) _____

_____- 17. Is line 5 divided by line 6 greater than 1.5? (Yes/No) _____

Alternative II

1. Sum of current cost estimates (total of all cost estimates shown in the eight paragraphs above) \$ _____

2. Current bond rating of most recent issuance of this firm and name of rating service _____ -

3. Date of issuance of bond _____ -

4. Date of maturity of bond _____ -

*5. Tangible net worth (if any portion of the cost estimates is included in "total liabilities" on your firm's financial statements, you may add the amount of that portion to this line) \$ _____ -

*6. Total assets in U.S. (required only if less than 90% of firm's assets are located in the U.S.) \$ _____ -

7. Is line 5 at least \$10 million? (Yes/No) _____

8. Is line 5 at least 6 times line 1? (Yes/No) _____

*9. Are at least 90% of firm's assets located in the U.S.? If not, complete line 10 (Yes/No) _____

10. Is line 6 at least 6 times line 1? (Yes/No) _____ -

I hereby certify that the wording of this letter is identical to the wording specified in Subsection R315-261-151(e) as such regulations were constituted on the date shown immediately below.

(Signature) (Name) (Title) (Date)

(f) A letter from the chief financial officer, as specified in Subsection R315-261-147(f), shall be worded as follows, except that instructions in parentheses are to be replaced with the relevant information and the parentheses deleted.

Letter From Chief Financial Officer

Director

Division of Waste Management and Radiation Control

P.O. 144880

Salt Lake City, Utah 84114-4880

I am the chief financial officer of (firm's name and address). This letter is in support of the use of the financial test

to demonstrate financial responsibility for liability coverage under Section R315-261-147(insert "and costs assured Subsection R315-261-143(e)" if applicable) as specified in Sections R315-261-140 through 143 and R315-261-147 through 151.

(Fill out the following paragraphs regarding facilities and liability coverage. If there are no facilities that belong in a particular paragraph, write "None" in the space indicated. For each facility, include its EPA Identification Number (if any issued), name, and address).

The firm identified above is the owner or operator of the following facilities for which liability coverage for (insert "sudden" or "nonsudden" or "both sudden and nonsudden") accidental occurrences is being demonstrated through the financial test specified in Sections R315-261-140 through 143 and R315-261-147 through 151: _____

The firm identified above guarantees, through the guarantee specified in Sections R315-261-140 through 143 and R315-261-147 through 151, liability coverage for (insert "sudden" or "nonsudden" or "both sudden and nonsudden") accidental occurrences at the following facilities owned or operated by the following: _____-. The firm identified above is (insert one or more: (1) The direct or higher-tier parent corporation of the owner or operator; (2) owned by the same parent corporation as the parent corporation of the owner or operator, and receiving the following value in consideration of this guarantee - _____; or (3) engaged in the following substantial business relationship with the owner or operator _____-, and receiving the following value in consideration of this guarantee _____-). (Attach a written description of the business relationship or a copy of the contract establishing such relationship to this letter.)

The firm identified above is the owner or operator of the following facilities for which liability coverage for (insert "sudden" or "nonsudden" or "both sudden and nonsudden") accidental occurrences is being demonstrated through the financial test specified in Sections R315-264-140 through 151 and 40 CFR 265.140 through 150, which are adopted by reference,:

The firm identified above guarantees, through the guarantee specified in Sections R315-264-140 through 151 and 40 CFR 265.140 through 150, which are adopted by reference; liability coverage for (insert "sudden" or "nonsudden" or "both sudden and nonsudden") accidental occurrences at the following facilities owned or operated by the following: _____. The firm identified above is (insert one or more: (1) The direct or higher-tier parent corporation of the owner or operator; (2) owned by the same parent corporation as the parent corporation of the owner or operator, and receiving the following value in consideration of this guarantee ____; or (3) engaged in the following substantial business relationship with the owner or operator _____, and receiving the following value in consideration of this guarantee ____). (Attach a written description of the business relationship or a copy of the contract establishing such relationship to this letter.)

(If you are using the financial test to demonstrate coverage of both liability and costs assured under Subsection R315-261-143(e) or closure or post-closure care costs under Sections R315-264-143; R315-264-145; 40 CFR 265.143 or 145, which are adopted by reference; fill in the following nine paragraphs regarding facilities and associated cost estimates. If there are no facilities that belong in a particular paragraph, write "None" in the space indicated. For each facility, include its EPA and State identification number (if any issued), name, address, and current cost estimates.)

1. This firm is the owner or operator of the following facilities for which financial assurance is demonstrated through the financial test specified in Sections R315-261-140 through 143 and R315-261-147 through 151. The current cost estimates covered by the test are shown for each facility:_____.

2. This firm guarantees, through the guarantee specified in Sections R315-261-140 through 143 and R315-261-147 through 151, the following facilities owned or operated by the guaranteed party. The current cost estimates so guaranteed are shown for each facility:_____. The firm identified above is (insert one or more: (1) The direct or higher-tier parent corporation of the owner or operator; (2) owned by the same parent corporation as the parent corporation of the owner or operator, and receiving the following value in consideration of this guarantee _____, or (3) engaged in the following substantial business relationship with the owner or operator _____, and receiving the following value in consideration of this guarantee _____). (Attach a written description of the business relationship or a copy of the contract establishing such relationship to this letter).

3. In all other states this firm, as owner or operator or guarantor, is demonstrating financial assurance for the following facilities through the use of a test equivalent or substantially equivalent to the financial test specified in Sections R315-261-140 through 143 and R315-261-147 through 151. The current cost estimates covered by such a test are shown for each facility:_____.

4. This firm is the owner or operator of the following hazardous secondary materials management facilities for which financial assurance is not demonstrated either to EPA or a State through the financial test or any other financial assurance mechanism specified in Sections R315-261-140 through 143 and R315-261-147 through 151 or equivalent or substantially equivalent State mechanisms. The current cost estimates not covered by such financial assurance are shown for each facility:_____.

5. This firm is the owner or operator of the following UIC facilities for which financial assurance for plugging and abandonment is required under 40 CFR 144. The current closure cost estimates as required by 40 CFR 144.62 are shown for each facility:_____.

6. This firm is the owner or operator of the following facilities for which financial assurance for closure or post-closure care is demonstrated through the financial test specified in Sections R315-264-140 through 151 and 40 CFR 265.140 through 150, which are adopted by reference. The current closure and/or post-closure cost estimates covered by the test are shown for each facility:_____.

7. This firm guarantees, through the guarantee specified in Sections R315-264-140 through 151 and 40 CFR 265.140 through 150, which are adopted by reference; the closure or post-closure care of the following facilities owned or operated by the guaranteed party. The current cost estimates for the closure or post-closure care so guaranteed are shown for each facility:_____. The firm identified above is (insert one or more: (1) The direct or higher-tier parent corporation of the owner or operator; (2) owned by the same parent corporation as the parent corporation of the owner or operator, and receiving the following value in consideration of this guarantee _____; or (3) engaged in the following substantial business relationship with the owner or operator _____, and receiving the following value in consideration of this guarantee _____).

(Attach a written description of the business relationship or a copy of the contract establishing such relationship to this letter).

8. In other jurisdictions, and states where the Director is not authorized to administer the financial requirements of R315-264.264-140 through 151 or 40 CFR 265.140 through 150, which are adopted by reference, this firm, as owner or operator or guarantor, is demonstrating financial assurance for the closure or post-closure care of the following facilities through the use of a test equivalent or substantially equivalent to the financial test specified in Sections R315-264-140 through 151 and 40 CFR 265.140 through 150, which are adopted by

reference. The current closure and/or post-closure cost estimates covered by such a test are shown for each facility:

9. This firm is the owner or operator of the following hazardous waste management facilities for which financial assurance for closure or, if a disposal facility, post-closure care, is not demonstrated either to EPA or a State through the financial test or any other financial assurance mechanism specified in Sections R315-264-140 through 151 and 40 CFR 265.140 through 150, which are adopted by reference, or equivalent or substantially equivalent State mechanisms. The current closure and/or post-closure cost estimates not covered by such financial assurance are shown for each facility: _____.

This firm (insert "is required" or "is not required") to file a Form 10K with the Securities and Exchange Commission (SEC) for the latest fiscal year.

The fiscal year of this firm ends on (month, day). The figures for the following items marked with an asterisk are derived from this firm's independently audited, year-end financial statements for the latest completed fiscal year, ended (date).

Part A. Liability Coverage for Accidental Occurrences
(Fill in Alternative I if the criteria of Subsection R315-261-147(f)(1)(i) are used. Fill in Alternative II if the criteria of Subsection R315-261-147(f)(1)(ii) are used.)

Alternative I

1. Amount of annual aggregate liability coverage to be demonstrated \$ _____.
- *2. Current assets \$ _____.
- *3. Current liabilities \$ _____.
4. Net working capital (line 2 minus line 3) \$ _____.
- *5. Tangible net worth \$ _____.
- *6. If less than 90% of assets are located in the U.S., give total U.S. assets \$ _____.
7. Is line 5 at least \$10 million? (Yes/No) _____.
8. Is line 4 at least 6 times line 1? (Yes/No) _____.
9. Is line 5 at least 6 times line 1? (Yes/No) _____.
- *10. Are at least 90% of assets located in the U.S.? (Yes/No) _____. If not, complete line 11.
11. Is line 6 at least 6 times line 1? (Yes/No) _____.

Alternative II

1. Amount of annual aggregate liability coverage to be demonstrated \$ _____.
2. Current bond rating of most recent issuance and name of rating service _____.
3. Date of issuance of bond _____.
4. Date of maturity of bond _____.
- *5. Tangible net worth \$ _____.
- *6. Total assets in U.S. (required only if less than 90% of assets are located in the U.S.) \$ _____.
7. Is line 5 at least \$10 million? (Yes/No) _____.
8. Is line 5 at least 6 times line 1? _____.
9. Are at least 90% of assets located in the U.S.? If not, complete line 10. (Yes/No) _____.
10. Is line 6 at least 6 times line 1? _____.

(Fill in part B if you are using the financial test to demonstrate assurance of both liability coverage and costs assured under Subsection R315-261-143(e) or closure or post-closure care costs under Sections R315-264-143; R315-264-145; 40 CFR 265.143 or 145, which is adopted by reference.)

Part B. Facility Care and Liability Coverage

(Fill in Alternative I if the criteria of Subsection R315-261-143(e)(1)(i) and Subsection R315-261-147(f)(1)(i) are used. Fill in Alternative II if the criteria of Subsection R315-261-143(e)(1)(ii) and Subsection R315-261-147(f)(1)(ii) are used.)

Alternative I

1. Sum of current cost estimates (total of all cost estimates listed above) \$ _____.
2. Amount of annual aggregate liability coverage to be

demonstrated \$ _____.

3. Sum of lines 1 and 2 \$ _____.
- *4. Total liabilities (if any portion of your cost estimates is included in your total liabilities, you may deduct that portion from this line and add that amount to lines 5 and 6) \$ _____.
- *5. Tangible net worth \$ _____.
- *6. Net worth \$ _____.
- *7. Current assets \$ _____.
- *8. Current liabilities \$ _____.
9. Net working capital (line 7 minus line 8) \$ _____.
- *10. The sum of net income plus depreciation, depletion, and amortization \$ _____.
- *11. Total assets in U.S. (required only if less than 90% of assets are located in the U.S.) \$ _____.
12. Is line 5 at least \$10 million? (Yes/No)
13. Is line 5 at least 6 times line 3? (Yes/No)
14. Is line 9 at least 6 times line 3? (Yes/No)
- *15. Are at least 90% of assets located in the U.S.? (Yes/No) If not, complete line 16.

16. Is line 11 at least 6 times line 3? (Yes/No)
17. Is line 4 divided by line 6 less than 2.0? (Yes/No)
18. Is line 10 divided by line 4 greater than 0.1? (Yes/No)
19. Is line 7 divided by line 8 greater than 1.5? (Yes/No)

Alternative II

1. Sum of current cost estimates (total of all cost estimates listed above) \$ _____.
2. Amount of annual aggregate liability coverage to be demonstrated \$ _____.
3. Sum of lines 1 and 2 \$ _____.
4. Current bond rating of most recent issuance and name of rating service _____.
5. Date of issuance of bond _____.
6. Date of maturity of bond _____.
- *7. Tangible net worth (if any portion of the cost estimates is included in "total liabilities" on your financial statements you may add that portion to this line) \$ _____.
- *8. Total assets in the U.S. (required only if less than 90% of assets are located in the U.S.) \$ _____.
9. Is line 7 at least \$10 million? (Yes/No)
10. Is line 7 at least 6 times line 3? (Yes/No)
- *11. Are at least 90% of assets located in the U.S.? (Yes/No) If not complete line 12.
12. Is line 8 at least 6 times line 3? (Yes/No)

I hereby certify that the wording of this letter is identical to the wording specified in Subsection R315-261-151(f) as such regulations were constituted on the date shown immediately below.

(Signature)
(Name)
(Title)
(Date)

(g)(1) A corporate guarantee, as specified in Subsection R315-261-143(e), shall be worded as follows, except that instructions in parentheses are to be replaced with the relevant information and the parentheses deleted:

Corporate Guarantee for Facility Care

Guarantee made this (date) by (name of guaranteeing entity), a business corporation organized under the laws of the State of (insert name of State), herein referred to as guarantor. This guarantee is made on behalf of the (owner or operator) of (business address), which is (one of the following: "our subsidiary"; "a subsidiary of (name and address of common parent corporation), of which guarantor is a subsidiary"; or "an entity with which guarantor has a substantial business relationship, as defined in Subsections R315-264-141(h) and 40 CFR 265.141(h), which is adopted by reference," to the Director of the Utah Division of Waste Management and Radiation Control (the Director).

Recitals

1. Guarantor meets or exceeds the financial test criteria and agrees to comply with the reporting requirements for guarantors as specified in Subsection R315-261-143(e).

2. (Owner or operator) owns or operates the following facility(ies) covered by this guarantee: (List for each facility: EPA and State Identification Number (if any issued), name, and address.

3. "Closure plans" as used below refer to the plans maintained as required by Sections R315-261-140 through 143 and R315-261-147 through 151 for the care of facilities as identified above.

4. For value received from (owner or operator), guarantor guarantees that in the event of a determination by the Director that the hazardous secondary materials at the owner or operator's facility covered by this guarantee do not meet the conditions of the exclusion under Subsection R315-261-4(a)(24), the guarantor shall dispose of any hazardous secondary material as hazardous waste, and close the facility in accordance with closure requirements found in Sections R315-264-110 through 120 or 40 CFR 265-110 through 121 which are adopted by reference, as applicable, or establish a trust fund as specified in Subsection R315-261-143(a) in the name of the owner or operator in the amount of the current cost estimate.

5. Guarantor agrees that if, at the end of any fiscal year before termination of this guarantee, the guarantor fails to meet the financial test criteria, guarantor shall send within 90 days, by certified mail, notice to the Director and to (owner or operator) that he intends to provide alternate financial assurance as specified in Sections R315-261-140 through 143 and R315-261-147 through 151, as applicable, in the name of (owner or operator). Within 120 days after the end of such fiscal year, the guarantor shall establish such financial assurance unless (owner or operator) has done so.

6. The guarantor agrees to notify the Director by certified mail, of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming guarantor as debtor, within 10 days after commencement of the proceeding.

7. Guarantor agrees that within 30 days after being notified by the Director of a determination that guarantor no longer meets the financial test criteria or that he is disallowed from continuing as a guarantor, he shall establish alternate financial assurance as specified in Sections R315-264-140 through 151 or 40 CFR 265-140 through 150 that are adopted by reference, or Sections R315-261-140 through 143 and R315-261-147 through 151, as applicable, in the name of (owner or operator) unless (owner or operator) has done so.

8. Guarantor agrees to remain bound under this guarantee notwithstanding any or all of the following: amendment or modification of the closure plan, the extension or reduction of the time of performance, or any other modification or alteration of an obligation of the owner or operator pursuant to Rules R315-264, 265, or Sections R315-261-140 through 143 and R315-261-147 through 151.

9. Guarantor agrees to remain bound under this guarantee for as long as (owner or operator) shall comply with the applicable financial assurance requirements of Sections R315-264-140 through 151 or 40 CFR 265-140 through 150 that are adopted by reference, or the financial assurance condition of Subsection R315-261-4(a)(24)(vi)(F) for the above-listed facilities, except as provided in paragraph 10 of this agreement.

10. (Insert the following language if the guarantor is (a) a direct or higher-tier corporate parent, or (b) a firm whose parent corporation is also the parent corporation of the owner or operator):

Guarantor may terminate this guarantee by sending notice by certified mail to the Director and to (owner or operator), provided that this guarantee may not be terminated unless and until (the owner or operator) obtains, and the Director approves, alternate coverage complying with Section R315-261-143.

(Insert the following language if the guarantor is a firm qualifying as a guarantor due to its "substantial business relationship" with the owner or operator)

Guarantor may terminate this guarantee 120 days following the receipt of notification, through certified mail, by the Director and by (the owner or operator).

11. Guarantor agrees that if (owner or operator) fails to provide alternate financial assurance as specified in Sections R315-264-140 through 151 or 40 CFR 265-140 through 150 that are adopted by reference, or Sections R315-261-140 through 143 and R315-261-147 through 151, as applicable, and obtain written approval of such assurance from the Director within 90 days after a notice of cancellation by the guarantor is received by the Director from guarantor, guarantor shall provide such alternate financial assurance in the name of (owner or operator).

12. Guarantor expressly waives notice of acceptance of this guarantee by the Director or by (owner or operator). Guarantor also expressly waives notice of amendments or modifications of the closure plan and of amendments or modifications of the applicable requirements of Sections R315-264-140 through 151 or 40 CFR 265-140 through 150 that are adopted by reference, or Sections R315-261-140 through 143 and R315-261-147 through 151.

I hereby certify that the wording of this guarantee is identical to the wording specified in Subsection R315-261-151(g)(1) as such regulations were constituted on the date first above written.

Effective date: (Name of guarantor) (Authorized signature for guarantor) (Name of person signing) (Title of person signing) Signature of witness or notary:

(2) A guarantee, as specified in Subsection R315-261-147(g), shall be worded as follows, except that instructions in parentheses are to be replaced with the relevant information and the parentheses deleted:

Guarantee for Liability Coverage

Guarantee made this (date) by (name of guaranteeing entity), a business corporation organized under the laws of (if incorporated within the United States insert "the State of ____" and insert name of State; if incorporated outside the United States insert the name of the country in which incorporated, the principal place of business within the United States, and the name and address of the registered agent in the State of the principal place of business), herein referred to as guarantor. This guarantee is made on behalf of (owner or operator) of (business address), which is one of the following: "our subsidiary;" "a subsidiary of (name and address of common parent corporation), of which guarantor is a subsidiary;" or "an entity with which guarantor has a substantial business relationship, as defined in (either Subsection R315-264-141(h) or 40 CFR 265.141(h), which is adopted by reference)", to any and all third parties who have sustained or may sustain bodily injury or property damage caused by (sudden and/or nonsudden) accidental occurrences arising from operation of the facility(ies) covered by this guarantee.

Recitals

1. Guarantor meets or exceeds the financial test criteria and agrees to comply with the reporting requirements for guarantors as specified in Subsection R315-261-147(g).

2. (Owner or operator) owns or operates the following facility(ies) covered by this guarantee: (List for each facility: EPA and state identification number (if any issued), name, and address; and if guarantor is incorporated outside the United States list the name and address of the guarantor's registered agent in each State.) This corporate guarantee satisfies RCRA third-party liability requirements for (insert "sudden" or "nonsudden" or "both sudden and nonsudden") accidental occurrences in above-named owner or operator facilities for coverage in the amount of (insert dollar amount) for each

occurrence and (insert dollar amount) annual aggregate.

3. For value received from (owner or operator), guarantor guarantees to any and all third parties who have sustained or may sustain bodily injury or property damage caused by (sudden and/or nonsudden) accidental occurrences arising from operations of the facility(ies) covered by this guarantee that in the event that (owner or operator) fails to satisfy a judgment or award based on a determination of liability for bodily injury or property damage to third parties caused by (sudden and/or nonsudden) accidental occurrences, arising from the operation of the above-named facilities, or fails to pay an amount agreed to in settlement of a claim arising from or alleged to arise from such injury or damage, the guarantor shall satisfy such judgment(s), award(s) or settlement agreement(s) up to the limits of coverage identified above.

4. Such obligation does not apply to any of the following:

(a) Bodily injury or property damage for which (insert owner or operator) is obligated to pay damages by reason of the assumption of liability in a contract or agreement. This exclusion does not apply to liability for damages that (insert owner or operator) would be obligated to pay in the absence of the contract or agreement.

(b) Any obligation of (insert owner or operator) under a workers' compensation, disability benefits, or unemployment compensation law or any similar law.

(c) Bodily injury to:

(1) An employee of (insert owner or operator) arising from, and in the course of, employment by (insert owner or operator); or

(2) The spouse, child, parent, brother, or sister of that employee as a consequence of, or arising from, and in the course of employment by (insert owner or operator). This exclusion applies:

(A) Whether (insert owner or operator) may be liable as an employer or in any other capacity; and

(B) To any obligation to share damages with or repay another person who shall pay damages because of the injury to persons identified in paragraphs (1) and (2).

(d) Bodily injury or property damage arising out of the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle or watercraft.

(e) Property damage to:

(1) Any property owned, rented, or occupied by (insert owner or operator);

(2) Premises that are sold, given away or abandoned by (insert owner or operator) if the property damage arises out of any part of those premises;

(3) Property loaned to (insert owner or operator);

(4) Personal property in the care, custody or control of (insert owner or operator);

(5) That particular part of real property on which (insert owner or operator) or any contractors or subcontractors working directly or indirectly on behalf of (insert owner or operator) are performing operations, if the property damage arises out of these operations.

5. Guarantor agrees that if, at the end of any fiscal year before termination of this guarantee, the guarantor fails to meet the financial test criteria, guarantor shall send within 90 days, by certified mail, notice to the Director and to (owner or operator) that he intends to provide alternate liability coverage as specified in Section R315-261-147, as applicable, in the name of (owner or operator). Within 120 days after the end of such fiscal year, the guarantor shall establish such liability coverage unless (owner or operator) has done so.

6. The guarantor agrees to notify the Director by certified mail of a voluntary or involuntary proceeding under title 11 (Bankruptcy), U.S. Code, naming guarantor as debtor, within 10 days after commencement of the proceeding. Guarantor agrees that within 30 days after being notified by the Director of a

determination that guarantor no longer meets the financial test criteria or that he is disallowed from continuing as a guarantor, he shall establish alternate liability coverage as specified in Section R315-261-147 in the name of (owner or operator), unless (owner or operator) has done so.

7. Guarantor reserves the right to modify this agreement to take into account amendment or modification of the liability requirements set by Section R315-261-147, provided that such modification shall become effective only if the Director does not disapprove the modification within 30 days of receipt of notification of the modification.

8. Guarantor agrees to remain bound under this guarantee for so long as (owner or operator) shall comply with the applicable requirements of Section R315-261-147 for the above-listed facility(ies), except as provided in paragraph 10 of this agreement.

9. (Insert the following language if the guarantor is (a) a direct or higher-tier corporate parent, or (b) a firm whose parent corporation is also the parent corporation of the owner or operator):

10. Guarantor may terminate this guarantee by sending notice by certified mail to the Director and to (owner or operator), provided that this guarantee may not be terminated unless and until (the owner or operator) obtains, and the Director approves, alternate liability coverage complying with Section R315-261-147.

(Insert the following language if the guarantor is a firm qualifying as a guarantor due to its "substantial business relationship" with the owner or operator):

Guarantor may terminate this guarantee 120 days following receipt of notification, through certified mail, by the Director and by (the owner or operator).

11. Guarantor hereby expressly waives notice of acceptance of this guarantee by any party.

12. Guarantor agrees that this guarantee is in addition to and does not affect any other responsibility or liability of the guarantor with respect to the covered facilities.

13. The Guarantor shall satisfy a third-party liability claim only on receipt of one of the following documents:

(a) Certification from the Principal and the third-party claimant(s) that the liability claim should be paid. The certification shall be worded as follows, except that instructions in parentheses are to be replaced with the relevant information and the parentheses deleted:

Certification of Valid Claim

The undersigned, as parties (insert Principal) and (insert name and address of third-party claimant(s)), hereby certify that the claim of bodily injury and/or property damage caused by a (sudden or nonsudden) accidental occurrence arising from operating (Principal's) facility should be paid in the amount of \$.

(Signatures) Principal (Notary) Date (Signatures)
Claimant(s) (Notary) Date

(b) A valid final court order establishing a judgment against the Principal for bodily injury or property damage caused by sudden or nonsudden accidental occurrences arising from the operation of the Principal's facility or group of facilities.

14. In the event of combination of this guarantee with another mechanism to meet liability requirements, this guarantee shall be considered (insert "primary" or "excess") coverage.

I hereby certify that the wording of the guarantee is identical to the wording specified in Subsection R315-261-151(g)(2) as such regulations were constituted on the date shown immediately below.

Effective date:

(Name of guarantor) (Authorized signature for guarantor)

(Name of person signing) (Title of person signing)

Signature of witness or notary:

(h) A hazardous waste facility liability endorsement as required by Section R315-261-147 shall be worded as follows, except that instructions in parentheses are to be replaced with the relevant information and the parentheses deleted:

Hazardous Secondary Material Reclamation/Intermediate Facility Liability Endorsement

1. This endorsement certifies that the policy to which the endorsement is attached provides liability insurance covering bodily injury and property damage in connection with the insured's obligation to demonstrate financial responsibility under Section R35-261-147. The coverage applies at (list EPA and state Identification Number (if any issued), name, and address for each facility) for (insert "sudden accidental occurrences," "nonsudden accidental occurrences," or "sudden and nonsudden accidental occurrences"; if coverage is for multiple facilities and the coverage is different for different facilities, indicate which facilities are insured for sudden accidental occurrences, which are insured for nonsudden accidental occurrences, and which are insured for both). The limits of liability are (insert the dollar amount of the "each occurrence" and "annual aggregate" limits of the Insurer's liability), exclusive of legal defense costs.

2. The insurance afforded with respect to such occurrences is subject to all of the terms and conditions of the policy; provided, however, that any provisions of the policy inconsistent with subsections (a) through (e) of this Paragraph 2 are hereby amended to conform with subsections (a) through (e):

(a) Bankruptcy or insolvency of the insured shall not relieve the Insurer of its obligations under the policy to which this endorsement is attached.

(b) The Insurer is liable for the payment of amounts within any deductible applicable to the policy, with a right of reimbursement by the insured for any such payment made by the Insurer. This provision does not apply with respect to that amount of any deductible for which coverage is demonstrated as specified in Subsection R315-261-147(f).

(c) Whenever requested by the Director of the Utah Division of Waste Management and Radiation Control (the Director), the Insurer agrees to furnish to the Director a signed duplicate original of the policy and all endorsements.

(d) Cancellation of this endorsement, whether by the Insurer, the insured, a parent corporation providing insurance coverage for its subsidiary, or by a firm having an insurable interest in and obtaining liability insurance on behalf of the owner or operator of the facility, shall be effective only upon written notice and only after the expiration of 60 days after a copy of such written notice is received by the Director.

(e) Any other termination of this endorsement shall be effective only upon written notice and only after the expiration of thirty (30) days after a copy of such written notice is received by the Director.

Attached to and forming part of policy No. _____ issued by (name of Insurer), herein called the Insurer, of (address of Insurer) to (name of insured) of (address) this _____ day of _____, 20____. The effective date of said policy is _____ day of _____, 20____.

I hereby certify that the wording of this endorsement is identical to the wording specified in Subsection R315-261-151(h) as such regulation was constituted on the date first above written, and that the Insurer is licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States.

(Signature of Authorized Representative of Insurer)

(Type name)

(Title), Authorized Representative of (name of Insurer)

(Address of Representative)

(i) A certificate of liability insurance as required in Section R315-261-147 shall be worded as follows, except that the instructions in parentheses are to be replaced with the relevant

information and the parentheses deleted:

Hazardous Secondary Material Reclamation/Intermediate Facility Certificate of Liability Insurance

1. (Name of Insurer), (the "Insurer"), of (address of Insurer) hereby certifies that it has issued liability insurance covering bodily injury and property damage to (name of insured), (the "insured"), of (address of insured) in connection with the insured's obligation to demonstrate financial responsibility under Rules R315-264 and 265, and the financial assurance condition of Subsection R315-261-4(a)(24)(vi)(F). The coverage applies at (list EPA and state Identification Number (if any issued), name, and address for each facility) for (insert "sudden accidental occurrences," "nonsudden accidental occurrences," or "sudden and nonsudden accidental occurrences"; if coverage is for multiple facilities and the coverage is different for different facilities, indicate which facilities are insured for sudden accidental occurrences, which are insured for nonsudden accidental occurrences, and which are insured for both). The limits of liability are (insert the dollar amount of the "each occurrence" and "annual aggregate" limits of the Insurer's liability), exclusive of legal defense costs. The coverage is provided under policy number, issued on (date). The effective date of said policy is (date).

2. The Insurer further certifies the following with respect to the insurance described in Paragraph 1:

(a) Bankruptcy or insolvency of the insured shall not relieve the Insurer of its obligations under the policy.

(b) The Insurer is liable for the payment of amounts within any deductible applicable to the policy, with a right of reimbursement by the insured for any such payment made by the Insurer. This provision does not apply with respect to that amount of any deductible for which coverage is demonstrated as specified in Section R315-261-147.

(c) Whenever requested by the Director of the Utah Division of Waste Management and Radiation Control (the Director), the Insurer agrees to furnish to the Director a signed duplicate original of the policy and all endorsements.

(d) Cancellation of the insurance, whether by the insurer, the insured, a parent corporation providing insurance coverage for its subsidiary, or by a firm having an insurable interest in and obtaining liability insurance on behalf of the owner or operator of the hazardous waste management facility, shall be effective only upon written notice and only after the expiration of 60 days after a copy of such written notice is received by the Director.

(e) Any other termination of the insurance shall be effective only upon written notice and only after the expiration of thirty (30) days after a copy of such written notice is received by the Director.

I hereby certify that the wording of this instrument is identical to the wording specified in Subsection R315-261-151(i) as such regulation was constituted on the date first above written, and that the Insurer is licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States.

(Signature of authorized representative of Insurer)

(Type name)

(Title), Authorized Representative of (name of Insurer)

(Address of Representative)

(j) A letter of credit, as specified in Subsection R315-261-147(h) of this chapter, shall be worded as follows, except that instructions in parentheses are to be replaced with the relevant information and the parentheses deleted:

Irrevocable Standby Letter of Credit

(Name and Address of Issuing Institution)

(Director name), Director,

Division of Waste Management and Radiation Control

195 North 1950 West

P.O Box 144880

Salt Lake City, Utah 84114-4880

Dear Sir or Madam:

We hereby establish our Irrevocable Standby Letter of Credit No. _____ in the favor of ("any and all third-party liability claimants" or insert name of trustee of the standby trust fund), at the request and for the account of (owner or operator's name and address) for third-party liability awards or settlements up to (in words) U.S. dollars \$ _____ per occurrence and the annual aggregate amount of (in words) U.S. dollars \$ _____, for sudden accidental occurrences and/or for third-party liability awards or settlements up to the amount of (in words) U.S. dollars \$ _____ per occurrence, and the annual aggregate amount of (in words) U.S. dollars \$ _____, for nonsudden accidental occurrences available upon presentation of a sight draft bearing reference to this letter of credit No. _____, and (insert the following language if the letter of credit is being used without a standby trust fund: (1) a signed certificate reading as follows:

Certificate of Valid Claim

The undersigned, as parties (insert principal) and (insert name and address of third party claimant(s)), hereby certify that the claim of bodily injury and/or property damage caused by a (sudden or nonsudden) accidental occurrence arising from operations of (principal's) facility should be paid in the amount of \$(). We hereby certify that the claim does not apply to any of the following:

(a) Bodily injury or property damage for which (insert principal) is obligated to pay damages by reason of the assumption of liability in a contract or agreement. This exclusion does not apply to liability for damages that (insert principal) would be obligated to pay in the absence of the contract or agreement.

(b) Any obligation of (insert principal) under a workers' compensation, disability benefits, or unemployment compensation law or any similar law.

(c) Bodily injury to:

(1) An employee of (insert principal) arising from, and in the course of, employment by (insert principal); or

(2) The spouse, child, parent, brother or sister of that employee as a consequence of, or arising from, and in the course of employment by (insert principal).

This exclusion applies:

(A) Whether (insert principal) may be liable as an employer or in any other capacity; and

(B) To any obligation to share damages with or repay another person who shall pay damages because of the injury to persons identified in paragraphs (1) and (2).

(d) Bodily injury or property damage arising out of the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle or watercraft.

(e) Property damage to:

(1) Any property owned, rented, or occupied by (insert principal);

(2) Premises that are sold, given away or abandoned by (insert principal) if the property damage arises out of any part of those premises;

(3) Property loaned to (insert principal);

(4) Personal property in the care, custody or control of (insert principal);

(5) That particular part of real property on which (insert principal) or any contractors or subcontractors working directly or indirectly on behalf of (insert principal) are performing operations, if the property damage arises out of these operations.

(Signatures)

Grantor

(Signatures)

Claimant(s)

or (2) a valid final court order establishing a judgment against the Grantor for bodily injury or property damage caused

by sudden or nonsudden accidental occurrences arising from the operation of the Grantor's facility or group of facilities.)

This letter of credit is effective as of (date) and shall expire on (date at least one year later), but such expiration date shall be automatically extended for a period of (at least one year) on (date and on each successive expiration date, unless, at least 120 days before the current expiration date, we notify you, the Director, and (owner's or operator's name) by certified mail that we have decided not to extend this letter of credit beyond the current expiration date.

Whenever this letter of credit is drawn on under and in compliance with the terms of this credit, we shall duly honor such draft upon presentation to us.

(Insert the following language if a standby trust fund is not being used: "In the event that this letter of credit is used in combination with another mechanism for liability coverage, this letter of credit shall be considered (insert "primary" or "excess" coverage)."

We certify that the wording of this letter of credit is identical to the wording specified in Subsection R315-261-151(j) as such regulations were constituted on the date shown immediately below.

(Signature(s)

and title(s) of official(s) of issuing institution

(Date).

This credit is subject to (insert "the most recent edition of the Uniform Customs and Practice for Documentary Credits, published and copyrighted by the International Chamber of Commerce," or "the Uniform Commercial Code").

(k) A surety bond, as specified in Subsection R315-261-147(i), shall be worded as follows: except that instructions in parentheses are to be replaced with the relevant information and the parentheses deleted:

Payment Bond

Surety Bond No. (Insert number)

Parties (Insert name and address of owner or operator), Principal, incorporated in (Insert State of incorporation) of (Insert city and State of principal place of business) and (Insert name and address of surety company(ies)), Surety Company(ies), of (Insert surety(ies) place of business).

(EPA and State Identification Number (if any issued), name, and address for each facility guaranteed by this bond:)

TABLE

	Nonsudden accidental occurrences	Sudden accidental occurrences
Penal Sum	(insert amount)	(insert amount)
Per Occurrence	(insert amount)	(insert amount)
Annual Aggregate	(insert amount)	(insert amount)

Penal Sum Per Occurrence (insert amount) (insert amount)
Annual Aggregate (insert amount) (insert amount)

Purpose: This is an agreement between the Surety(ies) and the Principal under which the Surety(ies), its(their) successors and assignees, agree to be responsible for the payment of claims against the Principal for bodily injury and/or property damage to third parties caused by ("sudden" and/or "nonsudden") accidental occurrences arising from operations of the facility or group of facilities in the sums prescribed herein; subject to the governing provisions and the following conditions.

Governing Provisions:

(1) Section 3004 of the Resource Conservation and Recovery Act of 1976, as amended.

(2) Rules adopted by the Utah Waste Management and Radiation Control Board, particularly Rules R315-264; 265, that is adopted by reference; and Sections R315-261-140 through 143 and R315-261-147 through 151 (if applicable).

Conditions:

(1) The Principal is subject to the applicable governing provisions that require the Principal to have and maintain liability coverage for bodily injury and property damage to third

parties caused by ("sudden" and/or "nonsudden") accidental occurrences arising from operations of the facility or group of facilities. Such obligation does not apply to any of the following:

(a) Bodily injury or property damage for which (insert Principal) is obligated to pay damages by reason of the assumption of liability in a contract or agreement. This exclusion does not apply to liability for damages that (insert Principal) would be obligated to pay in the absence of the contract or agreement.

(b) Any obligation of (insert Principal) under a workers' compensation, disability benefits, or unemployment compensation law or similar law.

(c) Bodily injury to:

(1) An employee of (insert Principal) arising from, and in the course of, employment by (insert principal); or

(2) The spouse, child, parent, brother or sister of that employee as a consequence of, or arising from, and in the course of employment by (insert Principal). This exclusion applies:

(A) Whether (insert Principal) may be liable as an employer or in any other capacity; and

(B) To any obligation to share damages with or repay another person who shall pay damages because of the injury to persons identified in paragraphs (1) and (2).

(d) Bodily injury or property damage arising out of the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle or watercraft.

(e) Property damage to:

(1) Any property owned, rented, or occupied by (insert Principal);

(2) Premises that are sold, given away or abandoned by (insert Principal) if the property damage arises out of any part of those premises;

(3) Property loaned to (insert Principal);

(4) Personal property in the care, custody or control of (insert Principal);

(5) That particular part of real property on which (insert Principal) or any contractors or subcontractors working directly or indirectly on behalf of (insert Principal) are performing operations, if the property damage arises out of these operations.

(2) This bond assures that the Principal will satisfy valid third party liability claims, as described in condition 1.

(3) If the Principal fails to satisfy a valid third party liability claim, as described above, the Surety(ies) becomes liable on this bond obligation.

(4) The Surety(ies) shall satisfy a third party liability claim only upon the receipt of one of the following documents:

(a) Certification from the Principal and the third party claimant(s) that the liability claim should be paid. The certification shall be worded as follows, except that instructions in parentheses are to be replaced with the relevant information and the parentheses deleted:

Certification of Valid Claim

The undersigned, as parties (insert name of Principal) and (insert name and address of third party claimant(s)), hereby certify that the claim of bodily injury and/or property damage caused by a (sudden or nonsudden) accidental occurrence arising from operating (Principal's) facility should be paid in the amount of \$().

(Signature)

Principal

(Notary) Date

(Signature(s))

Claimant(s)

(Notary) Date

or (b) A valid final court order establishing a judgment against the Principal for bodily injury or property damage caused by sudden or nonsudden accidental occurrences arising from the operation of the Principal's facility or group of

facilities.

(5) In the event of combination of this bond with another mechanism for liability coverage, this bond shall be considered (insert "primary" or "excess") coverage.

(6) The liability of the Surety(ies) shall not be discharged by any payment or succession of payments hereunder, unless and until such payment or payments shall amount in the aggregate to the penal sum of the bond. In no event shall the obligation of the Surety(ies) hereunder exceed the amount of said annual aggregate penal sum, provided that the Surety(ies) furnish(es) notice to the Director forthwith of all claims filed and payments made by the Surety(ies) under this bond.

(7) The Surety(ies) may cancel the bond by sending notice of cancellation by certified mail to the Principal and the Director, provided, however, that cancellation shall not occur during the 120 days beginning on the date of receipt of the notice of cancellation by the Principal and the Director, as evidenced by the return receipt.

(8) The Principal may terminate this bond by sending written notice to the Surety(ies) and to the Director.

(9) The Surety(ies) hereby waive(s) notification of amendments to applicable laws, statutes, rules and regulations and agree(s) that no such amendment shall in any way alleviate its (their) obligation on this bond.

(10) This bond is effective from (insert date) (12:01 a.m., standard time, at the address of the Principal as stated herein) and shall continue in force until terminated as described above.

In Witness Whereof, the Principal and Surety(ies) have executed this Bond and have affixed their seals on the date set forth above.

The persons whose signatures appear below hereby certify that they are authorized to execute this surety bond on behalf of the Principal and Surety(ies) and that the wording of this surety bond is identical to the wording specified in Subsection R315-261-151(k), as such regulations were constituted on the date this bond was executed.

PRINCIPAL

(Signature(s))

(Name(s))

(Title(s))

(Corporate Seal)

CORPORATE SURETY(IES)

(Name and address)

State of incorporation: Liability Limit: \$(Signature(s))

(Name(s) and title(s))

(Corporate seal)

(For every co-surety, provide signature(s), corporate seal, and other information in the same manner as for Surety above.)

Bond premium: \$

(l)(1) A trust agreement, as specified in Subsection R315-261-147(j), shall be worded as follows, except that instructions in parentheses are to be replaced with the relevant information and the parentheses deleted:

Trust Agreement

Trust Agreement, the "Agreement," entered into as of (date) by and between (name of the owner or operator) a (name of State) (insert "corporation," "partnership," "association," or "proprietorship"), the "Grantor," and (name of corporate trustee), (insert, "incorporated in the State of ____" or "a national bank"), the "trustee."

Whereas, the Waste Management and Radiation Control Board of the State of Utah, "the Board", has established certain regulations applicable to the Grantor, requiring that an owner or operator shall demonstrate financial responsibility for bodily injury and property damage to third parties caused by sudden accidental and/or nonsudden accidental occurrences arising from operations of the facility or group of facilities.

Whereas, the Grantor has elected to establish a trust to assure all or part of such financial responsibility for the facilities

identified herein.

Whereas, the Grantor, acting through its duly authorized officers, has selected the Trustee to be the trustee under this agreement, and the Trustee is willing to act as trustee.

Now, therefore, the Grantor and the Trustee agree as follows:

Section 1. Definitions. As used in this Agreement:

(a) The term "BOARD", "Utah Waste Management and Radiation Control Board" created pursuant to Utah Code Annotated 19-1-106.

(b) The term "Director" means the Director, of the Division of Waste Management and Radiation Control his successors, designees, and any subsequent entity of the State of Utah upon whom the duties of regulation and enforcement of regulations governing hazardous waste.

(c) The term "Grantor" means the owner or operator who enters into this Agreement and any successors or assigns of the Grantor.

(d) The term "Trustee" means the Trustee who enters into this Agreement and any successor Trustee.

Section 2. Identification of Facilities. This agreement pertains to the facilities identified on attached schedule A (on schedule A, for each facility list the EPA and State Identification Number (if any issued), name, and address of the facility(ies) and the amount of liability coverage, or portions thereof, if more than one instrument affords combined coverage as demonstrated by this Agreement).

Section 3. Establishment of Fund. The Grantor and the Trustee hereby establish a trust fund, hereinafter the "Fund," for the benefit of any and all third parties injured or damaged by (sudden and/or nonsudden) accidental occurrences arising from operation of the facility(ies) covered by this guarantee, in the amounts of _____(up to \$1 million) per occurrence and (up to \$2 million) annual aggregate for sudden accidental occurrences and _____(up to \$3 million) per occurrence and _____(up to \$6 million) annual aggregate for nonsudden occurrences, except that the Fund is not established for the benefit of third parties for the following:

(a) Bodily injury or property damage for which (insert Grantor) is obligated to pay damages by reason of the assumption of liability in a contract or agreement. This exclusion does not apply to liability for damages that (insert Grantor) would be obligated to pay in the absence of the contract or agreement.

(b) Any obligation of (insert Grantor) under a workers' compensation, disability benefits, or unemployment compensation law or any similar law.

(c) Bodily injury to:

(1) An employee of (insert Grantor) arising from, and in the course of, employment by (insert Grantor); or

(2) The spouse, child, parent, brother or sister of that employee as a consequence of, or arising from, and in the course of employment by (insert Grantor). This exclusion applies:

(A) Whether (insert Grantor) may be liable as an employer or in any other capacity; and

(B) To any obligation to share damages with or repay another person who shall pay damages because of the injury to persons identified in paragraphs (1) and (2).

(d) Bodily injury or property damage arising out of the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle or watercraft.

(e) Property damage to:

(1) Any property owned, rented, or occupied by (insert Grantor);

(2) Premises that are sold, given away or abandoned by (insert Grantor) if the property damage arises out of any part of those premises;

(3) Property loaned to (insert Grantor);

(4) Personal property in the care, custody or control of

(insert Grantor);

(5) That particular part of real property on which (insert Grantor) or any contractors or subcontractors working directly or indirectly on behalf of (insert Grantor) are performing operations, if the property damage arises out of these operations.

In the event of combination with another mechanism for liability coverage, the Fund shall be considered (insert "primary" or "excess") coverage.

The Fund is established initially as consisting of the property, which is acceptable to the Trustee, described in Schedule B attached hereto. Such property and any other property subsequently transferred to the Trustee is referred to as the Fund, together with all earnings and profits thereon, less any payments or distributions made by the Trustee pursuant to this Agreement. The Fund shall be held by the Trustee, IN TRUST, as hereinafter provided. The Trustee shall not be responsible nor shall it undertake any responsibility for the amount or adequacy of, nor any duty to collect from the Grantor, any payments necessary to discharge any liabilities of the Grantor established by Director.

Section 4. Payment for Bodily Injury or Property Damage. The Trustee shall satisfy a third party liability claim by making payments from the Fund only upon receipt of one of the following documents;

(a) Certification from the Grantor and the third party claimant(s) that the liability claim should be paid. The certification shall be worded as follows, except that instructions in parentheses are to be replaced with the relevant information and the parentheses deleted:

Certification of Valid Claim

The undersigned, as parties (insert Grantor) and (insert name and address of third party claimant(s)), hereby certify that the claim of bodily injury and/or property damage caused by a (sudden or nonsudden) accidental occurrence arising from operating (Grantor's) facility or group of facilities should be paid in the amount of \$ ().

(Signatures)

Grantor

(Signatures)

Claimant(s)

(b) A valid final court order establishing a judgment against the Grantor for bodily injury or property damage caused by sudden or nonsudden accidental occurrences arising from the operation of the Grantor's facility or group of facilities.

Section 5. Payments Comprising the Fund. Payments made to the Trustee for the Fund shall consist of cash or securities acceptable to the Trustee.

Section 6. Trustee Management. The Trustee shall invest and reinvest the principal and income, in accordance with general investment policies and guidelines which the Grantor may communicate in writing to the Trustee from time to time, subject, however, to the provisions of this section. In investing, reinvesting, exchanging, selling, and managing the Fund, the Trustee shall discharge his duties with respect to the trust fund solely in the interest of the beneficiary and with the care, skill, prudence, and diligence under the circumstance then prevailing which persons of prudence, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and with like aims; except that:

(i) Securities or other obligations of the Grantor, or any other owner or operator of the facilities, or any of their affiliates as defined in the Investment Company Act of 1940, as amended, 15 U.S.C. 80a-2.(a), shall not be acquired or held unless they are securities or other obligations of the Federal or a State government;

(ii) The Trustee is authorized to invest the Fund in time or demand deposits of the Trustee, to the extent insured by an agency of the Federal or State government; and

(iii) The Trustee is authorized to hold cash awaiting

investment or distribution uninvested for a reasonable time and without liability for the payment of interest thereon.

Section 7. Commingling and Investment. The Trustee is expressly authorized in its discretion:

(a) To transfer from time to time any or all of the assets of the Fund to any common commingled, or collective trust fund created by the Trustee in which the fund is eligible to participate, subject to all of the provisions thereof, to be commingled with the assets of other trusts participating therein; and

(b) To purchase shares in any investment company registered under the Investment Company Act of 1940, 15 U.S.C. 81a-1 et seq., including one which may be created, managed, underwritten, or to which investment advice is rendered or the shares of which are sold by the Trustee. The Trustee may vote such shares in its discretion.

Section 8. Express Powers of Trustee. Without in any way limiting the powers and discretions conferred upon the Trustee by the other provisions of this Agreement or by law, the Trustee is expressly authorized and empowered:

(a) To sell, exchange, convey, transfer, or otherwise dispose of any property held by it, by public or private sale. No person dealing with the Trustee shall be bound to see to the application of the purchase money or to inquire into the validity or expediency of any such sale or other disposition;

(b) To make, execute, acknowledge, and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted;

(c) To register any securities held in the Fund in its own name or in the name of a nominee and to hold any security in bearer form or in book entry, or to combine certificates representing such securities with certificates of the same issue held by the Trustee in other fiduciary capacities, or to deposit or arrange for the deposit of such securities in a qualified central depository even though, when so deposited, such securities may be merged and held in bulk in the name of the nominee of such depository with other securities deposited therein by another person, or to deposit or arrange for the deposit of any securities issued by the United States Government, or any agency or instrumentality thereof, with a Federal Reserve bank, but the books and records of the Trustee shall at all times show that all such securities are part of the Fund;

(d) To deposit any cash in the Fund in interest-bearing accounts maintained or savings certificates issued by the Trustee, in its separate corporate capacity, or in any other banking institution affiliated with the Trustee, to the extent insured by an agency of the Federal or State government; and

(e) To compromise or otherwise adjust all claims in favor of or against the Fund.

Section 9. Taxes and Expenses. All taxes of any kind that may be assessed or levied against or in respect of the Fund and all brokerage commissions incurred by the Fund shall be paid from the Fund. All other expenses incurred by the Trustee in connection with the administration of this Trust, including fees for legal services rendered to the Trustee, the compensation of the Trustee to the extent not paid directly by the Grantor, and all other proper charges and disbursements of the Trustee shall be paid from the Fund.

Section 10. Annual Valuations. The Trustee shall annually, at least 30 days prior to the anniversary date of establishment of the Fund, furnish to the Grantor and to the Director a statement confirming the value of the Trust. Any securities in the Fund shall be valued at market value as of no more than 60 days prior to the anniversary date of establishment of the Fund. The failure of the Grantor to object in writing to the Trustee within 90 days after the statement has been furnished to the Grantor and the Director shall constitute a conclusively binding assent by the Grantor barring the Grantor from asserting

any claim or liability against the Trustee with respect to matters disclosed in the statement.

Section 11. Advice of Counsel. The Trustee may from time to time consult with counsel, who may be counsel to the Grantor with respect to any question arising as to the construction of this Agreement or any action to be taken hereunder. The Trustee shall be fully protected, to the extent permitted by law, in acting upon the advice of counsel.

Section 12. Trustee Compensation. The Trustee shall be entitled to reasonable compensation for its services as agreed upon in writing from time to time with the Grantor.

Section 13. Successor Trustee. The Trustee may resign or the Grantor may replace the Trustee, but such resignation or replacement shall not be effective until the Grantor has appointed a successor trustee and this successor accepts the appointment. The successor trustee shall have the same powers and duties as those conferred upon the Trustee hereunder. Upon the successor trustee's acceptance of the appointment, the Trustee shall assign, transfer, and pay over to the successor trustee the funds and properties then constituting the Fund. If for any reason the Grantor cannot or does not act in the event of the resignation of the Trustee, the Trustee may apply to a court of competent jurisdiction for the appointment of a successor trustee or for instructions. The successor trustee shall specify the date on which it assumes administration of the trust in a writing sent to the Grantor, the Director, and the present Trustee by certified mail 10 days before such change becomes effective. Any expenses incurred by the Trustee as a result of any of the acts contemplated by this section shall be paid as provided in Section 9.

Section 14. Instructions to the Trustee. All orders, requests, and instructions by the Grantor to the Trustee shall be in writing, signed by such persons as are designated in the attached Exhibit A or such other designees as the Grantor may designate by amendments to Exhibit A. The Trustee shall be fully protected in acting without inquiry in accordance with the Grantor's orders, requests, and instructions. All orders, requests, and instructions by the Director to the Trustee shall be in writing, signed by the Director, or their designees, and the Trustee shall act and shall be fully protected in acting in accordance with such orders, requests, and instructions. The Trustee shall have the right to assume, in the absence of written notice to the contrary, that no event constituting a change or a termination of the authority of any person to act on behalf of the Grantor or the Director hereunder has occurred. The Trustee shall have no duty to act in the absence of such orders, requests, and instructions from the Grantor and/or the Director, except as provided for herein.

Section 15. Notice of Nonpayment. If a payment for bodily injury or property damage is made under Section 4 of this trust, the Trustee shall notify the Grantor of such payment and the amount(s) thereof within five (5) working days. The Grantor shall, on or before the anniversary date of the establishment of the Fund following such notice, either make payments to the Trustee in amounts sufficient to cause the trust to return to its value immediately prior to the payment of claims under Section 4, or shall provide written proof to the Trustee that other financial assurance for liability coverage has been obtained equaling the amount necessary to return the trust to its value prior to the payment of claims. If the Grantor does not either make payments to the Trustee or provide the Trustee with such proof, the Trustee shall within 10 working days after the anniversary date of the establishment of the Fund provide a written notice of nonpayment to the Director.

Section 16. Amendment of Agreement. This Agreement may be amended by an instrument in writing executed by the Grantor, the Trustee, and the Director, or by the Trustee and the Director if the Grantor ceases to exist.

Section 17. Irrevocability and Termination. Subject to the

right of the parties to amend this Agreement as provided in Section 16, this Trust shall be irrevocable and shall continue until terminated at the written agreement of the Grantor, the Trustee, and the Director, or by the Trustee and the Director, if the Grantor ceases to exist. Upon termination of the Trust, all remaining trust property, less final trust administration expenses, shall be delivered to the Grantor.

The Director shall agree to termination of the Trust when the owner or operator substitutes alternate financial assurance as specified in this section.

Section 18. Immunity and Indemnification. The Trustee shall not incur personal liability of any nature in connection with any act or omission, made in good faith, in the administration of this Trust, or in carrying out any directions by the Grantor or the Director issued in accordance with this Agreement. The Trustee shall be indemnified and saved harmless by the Grantor or from the Trust Fund, or both, from and against any personal liability to which the Trustee may be subjected by reason of any act or conduct in its official capacity, including all expenses reasonably incurred in its defense in the event the Grantor fails to provide such defense.

Section 19. Choice of Law. This Agreement shall be administered, construed, and enforced according to the laws of the State of Utah.

Section 20. Interpretation. As used in this Agreement, words in the singular include the plural and words in the plural include the singular. The descriptive headings for each section of this Agreement shall not affect the interpretation or the legal efficacy of this Agreement.

In Witness Whereof the parties have caused this Agreement to be executed by their respective officers duly authorized and their corporate seals to be hereunto affixed and attested as of the date first above written. The parties below certify that the wording of this Agreement is identical to the wording specified in Subsection R315-261-151(l) as such regulations were constituted on the date first above written.

(Signature of Grantor)

(Title)

Attest:

(Title)

(Seal)

(Signature of Trustee)

Attest:

(Title)

(Seal)

(2) The following is an example of the certification of acknowledgement which shall accompany the trust agreement for a trust fund as specified in Subsection R315-261-147(j). State requirements may differ on the proper

State of

County of

On this (date), before me personally came (owner or operator) to me known, who, being by me duly sworn, did depose and say that she/he resides at (address), that she/he is (title) of (corporation), the corporation described in and which executed the above instrument; that she/he knows the seal of said corporation; that the seal affixed to such instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation, and that she/he signed her/ his name thereto by like order.

(Signature of Notary Public)

(m)(1) A standby trust agreement, as specified in Subsection R315-261-147(h), shall be worded as follows, except that instructions in parentheses are to be replaced with the relevant information and the parentheses deleted:

Standby Trust Agreement

Trust Agreement, the "Agreement," entered into as of (date) by and between (name of the owner or operator) a (name of a State) (insert "corporation," "partnership," "association," or

"proprietorship"), the "Grantor," and (name of corporate trustee), (insert, "incorporated in the State of _____" or "a national bank"), the "trustee."

Whereas the Utah Waste Management and Radiation Control Board (Board), has established certain regulations applicable to the Grantor, requiring that an owner or operator shall demonstrate financial responsibility for bodily injury and property damage to third parties caused by sudden accidental and/or nonsudden accidental occurrences arising from operations of the facility or group of facilities.

Whereas, the Grantor has elected to establish a standby trust into which the proceeds from a letter of credit may be deposited to assure all or part of such financial responsibility for the facilities identified herein.

Whereas, the Grantor, acting through its duly authorized officers, has selected the Trustee to be the trustee under this agreement, and the Trustee is willing to act as trustee.

Now, therefore, the Grantor and the Trustee agree as follows:

Section 1. Definitions. As used in this Agreement:

(a) The term "Board", "Utah Waste Management and Radiation Control Board" created pursuant to Utah Code Annotated 19-1-106.

(b) The term "Director" means the Director, of the Division of Waste Management and Radiation Control his successors, designees, and any subsequent entity of the State of Utah upon whom the duties of regulation and enforcement of regulations governing hazardous waste.

(c) The term Grantor means the owner or operator who enters into this Agreement and any successors or assigns of the Grantor.

(d) The term Trustee means the Trustee who enters into this Agreement and any successor Trustee.

Section 2. Identification of Facilities. This Agreement pertains to the facilities identified on attached schedule A (on schedule A, for each facility list the EPA and State Identification Number (if any issued), name, and address of the facility(ies) and the amount of liability coverage, or portions thereof, if more than one instrument affords combined coverage as demonstrated by this Agreement).

Section 3. Establishment of Fund. The Grantor and the Trustee hereby establish a standby trust fund, hereafter the "Fund," for the benefit of any and all third parties injured or damaged by (sudden and/or nonsudden) accidental occurrences arising from operation of the facility(ies) covered by this guarantee, in the amounts of _____-(up to \$1 million) per occurrence and _____-(up to \$2 million) annual aggregate for sudden accidental occurrences and _____-(up to \$3 million) per occurrence and _____-(up to \$6 million) annual aggregate for nonsudden occurrences, except that the Fund is not established for the benefit of third parties for the following:

(a) Bodily injury or property damage for which (insert Grantor) is obligated to pay damages by reason of the assumption of liability in a contract or agreement. This exclusion does not apply to liability for damages that (insert Grantor) would be obligated to pay in the absence of the contract or agreement.

(b) Any obligation of (insert Grantor) under a workers' compensation, disability benefits, or unemployment compensation law or any similar law.

(c) Bodily injury to:

(1) An employee of (insert Grantor) arising from, and in the course of, employment by (insert Grantor); or

(2) The spouse, child, parent, brother or sister of that employee as a consequence of, or arising from, and in the course of employment by (insert Grantor).

This exclusion applies:

(A) Whether (insert Grantor) may be liable as an employer or in any other capacity; and

(B) To any obligation to share damages with or repay another person who shall pay damages because of the injury to persons identified in paragraphs (1) and (2).

(d) Bodily injury or property damage arising out of the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle or watercraft.

(e) Property damage to:

(1) Any property owned, rented, or occupied by (insert Grantor);

(2) Premises that are sold, given away or abandoned by (insert Grantor) if the property damage arises out of any part of those premises;

(3) Property loaned by (insert Grantor);

(4) Personal property in the care, custody or control of (insert Grantor);

(5) That particular part of real property on which (insert Grantor) or any contractors or subcontractors working directly or indirectly on behalf of (insert Grantor) are performing operations, if the property damage arises out of these operations.

In the event of combination with another mechanism for liability coverage, the Fund shall be considered (insert "primary" or "excess") coverage.

The Fund is established initially as consisting of the proceeds of the letter of credit deposited into the Fund. Such proceeds and any other property subsequently transferred to the Trustee is referred to as the Fund, together with all earnings and profits thereon, less any payments or distributions made by the Trustee pursuant to this Agreement. The Fund shall be held by the Trustee, IN TRUST, as hereinafter provided. The Trustee shall not be responsible nor shall it undertake any responsibility for the amount or adequacy of, nor any duty to collect from the Grantor, any payments necessary to discharge any liabilities of the Grantor established by the Director.

Section 4. Payment for Bodily Injury or Property Damage. The Trustee shall satisfy a third party liability claim by drawing on the letter of credit described in Schedule B and by making payments from the Fund only upon receipt of one of the following documents:

(a) Certification from the Grantor and the third party claimant(s) that the liability claim should be paid. The certification shall be worded as follows, except that instructions in parentheses are to be replaced with the relevant information and the parentheses deleted:

Certification of Valid Claim

The undersigned, as parties (insert Grantor) and (insert name and address of third party claimant(s)), hereby certify that the claim of bodily injury and/or property damage caused by a (sudden or nonsudden) accidental occurrence arising from operating (Grantor's) facility should be paid in the amount of \$()

(Signature)

Grantor

(Signatures)

Claimant(s)

(b) A valid final court order establishing a judgment against the Grantor for bodily injury or property damage caused by sudden or nonsudden accidental occurrences arising from the operation of the Grantor's facilities.

Section 5. Payments Comprising the Fund. Payments made to the Trustee for the Fund shall consist of the proceeds from the letter of credit drawn upon by the Trustee in accordance with the requirements of Subsection R315-261-151(k) and Section 4 of this Agreement.

Section 6. Trustee Management. The Trustee shall invest and reinvest the principal and income, in accordance with general investment policies and guidelines which the Grantor may communicate in writing to the Trustee from time to time, subject, however, to the provisions of this Section. In investing, reinvesting, exchanging, selling, and managing the Fund, the

Trustee shall discharge his duties with respect to the trust fund solely in the interest of the beneficiary and with the care, skill, prudence, and diligence under the circumstances then prevailing which persons of prudence, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and with like aims; except that:

(i) Securities or other obligations of the Grantor, or any other owner or operator of the facilities, or any of their affiliates as defined in the Investment Company Act of 1940, as amended, 15 U.S.C. 80a-2(a), shall not be acquired or held, unless they are securities or other obligations of the Federal or a State government;

(ii) The Trustee is authorized to invest the Fund in time or demand deposits of the Trustee, to the extent insured by an agency of the Federal or a State government; and

(iii) The Trustee is authorized to hold cash awaiting investment or distribution uninvested for a reasonable time and without liability for the payment of interest thereon.

Section 7. Commingling and Investment. The Trustee is expressly authorized in its discretion:

(a) To transfer from time to time any or all of the assets of the Fund to any common, commingled, or collective trust fund created by the Trustee in which the Fund is eligible to participate, subject to all of the provisions thereof, to be commingled with the assets of other trusts participating therein; and

(b) To purchase shares in any investment company registered under the Investment Company Act of 1940, 15 U.S.C. 80a-1 et seq., including one which may be created, managed, underwritten, or to which investment advice is rendered or the shares of which are sold by the Trustee. The Trustee may vote such shares in its discretion.

Section 8. Express Powers of Trustee. Without in any way limiting the powers and discretions conferred upon the Trustee by the other provisions of this Agreement or by law, the Trustee is expressly authorized and empowered:

(a) To sell, exchange, convey, transfer, or otherwise dispose of any property held by it, by public or private sale. No person dealing with the Trustee shall be bound to see to the application of the purchase money or to inquire into the validity or expediency of any such sale or other disposition;

(b) To make, execute, acknowledge, and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted;

(c) To register any securities held in the Fund in its own name or in the name of a nominee and to hold any security in bearer form or in book entry, or to combine certificates representing such securities with certificates of the same issue held by the Trustee in other fiduciary capacities, or to deposit or arrange for the deposit of such securities in a qualified central depository even though, when so deposited, such securities may be merged and held in bulk in the name of the nominee of such depository with other securities deposited therein by another person, or to deposit or arrange for the deposit of any securities issued by the United States Government, or any agency or instrumentality thereof, with a Federal Reserve Bank, but the books and records of the Trustee shall at all times show that all such securities are part of the Fund;

(d) To deposit any cash in the Fund in interest-bearing accounts maintained or savings certificates issued by the Trustee, in its separate corporate capacity, or in any other banking institution affiliated with the Trustee, to the extent insured by an agency of the Federal or State government; and

(e) To compromise or otherwise adjust all claims in favor of or against the Fund.

Section 9. Taxes and Expenses. All taxes of any kind that may be assessed or levied against or in respect of the Fund and all brokerage commissions incurred by the Fund shall be paid

from the Fund. All other expenses incurred by the Trustee in connection with the administration of this Trust, including fees for legal services rendered to the Trustee, the compensation of the Trustee to the extent not paid directly by the Grantor, and all other proper charges and disbursements to the Trustee shall be paid from the Fund.

Section 10. Advice of Counsel. The Trustee may from time to time consult with counsel, who may be counsel to the Grantor, with respect to any question arising as to the construction of this Agreement or any action to be taken hereunder. The Trustee shall be fully protected, to the extent permitted by law, in acting upon the advice of counsel.

Section 11. Trustee Compensation. The Trustee shall be entitled to reasonable compensation for its services as agreed upon in writing from time to time with the Grantor.

Section 12. Successor Trustee. The Trustee may resign or the Grantor may replace the Trustee, but such resignation or replacement shall not be effective until the Grantor has appointed a successor trustee and this successor accepts the appointment. The successor trustee shall have the same powers and duties as those conferred upon the Trustee hereunder. Upon the successor trustee's acceptance of the appointment, the Trustee shall assign, transfer, and pay over to the successor trustee the funds and properties then constituting the Fund. If for any reason the Grantor cannot or does not act in the event of the resignation of the Trustee, the Trustee may apply to a court of competent jurisdiction for the appointment of a successor trustee or for instructions. The successor trustee shall specify the date on which it assumes administration of the trust in a writing sent to the Grantor, the Director and the present Trustee by certified mail 10 days before such change becomes effective. Any expenses incurred by the Trustee as a result of any of the acts contemplated by this Section shall be paid as provided in Section 9.

Section 13. Instructions to the Trustee. All orders, requests, certifications of valid claims, and instructions to the Trustee shall be in writing, signed by such persons as are designated in the attached Exhibit A or such other designees as the Grantor may designate by amendments to Exhibit A. The Trustee shall be fully protected in acting without inquiry in accordance with the Grantor's orders, requests, and instructions. The Trustee shall have the right to assume, in the absence of written notice to the contrary, that no event constituting a change or a termination of the authority of any person to act on behalf of the Grantor or the Director hereunder has occurred. The Trustee shall have no duty to act in the absence of such orders, requests, and instructions from the Grantor and/or the Director, except as provided for herein.

Section 14. Amendment of Agreement. This Agreement may be amended by an instrument in writing executed by the Grantor, the Trustee, and the Director, or by the Trustee and the Director if the Grantor ceases to exist.

Section 15. Irrevocability and Termination. Subject to the right of the parties to amend this Agreement as provided in Section 14, this Trust shall be irrevocable and shall continue until terminated at the written agreement of the Grantor, the Trustee, and the Director, or by the Trustee and the Director, if the Grantor ceases to exist. Upon termination of the Trust, all remaining trust property, less final trust administration expenses, shall be paid to the Grantor.

The Director shall agree to termination of the Trust when the owner or operator substitutes alternative financial assurance as specified in this section.

Section 16. Immunity and indemnification. The Trustee shall not incur personal liability of any nature in connection with any act or omission, made in good faith, in the administration of this Trust, or in carrying out any directions by the Grantor and the Director issued in accordance with this Agreement. The Trustee shall be indemnified and saved

harmless by the Grantor or from the Trust Fund, or both, from and against any personal liability to which the Trustee may be subjected by reason of any act or conduct in its official capacity, including all expenses reasonably incurred in its defense in the event the Grantor fails to provide such defense.

Section 17. Choice of Law. This Agreement shall be administered, construed, and enforced according to the laws of the State of Utah.

Section 18. Interpretation. As used in this Agreement, words in the singular include the plural and words in the plural include the singular. The descriptive headings for each Section of this Agreement shall not affect the interpretation of the legal efficacy of this Agreement.

In Witness Whereof the parties have caused this Agreement to be executed by their respective officers duly authorized and their corporate seals to be hereunto affixed and attested as of the date first above written. The parties below certify that the wording of this Agreement is identical to the wording specified in Subsection R315-261-151(m) as such regulations were constituted on the date first above written.

(Signature of Grantor)

(Title)

Attest:

(Title)

(Seal)

(Signature of Trustee)

Attest:

(Title)

(Seal)

(2) The following is an example of the certification of acknowledgement which shall accompany the trust agreement for a standby trust fund as specified in Subsection R315-261-147(h).

State of

County of

On this (date), before me personally came (owner or operator) to me known, who, being by me duly sworn, did depose and say that she/he resides at (address), that she/he is (title) of (corporation), the corporation described in and which executed the above instrument; that she/he knows the seal of said corporation; that the seal affixed to such instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation, and that she/he signed her/ his name thereto by like order.

(Signature of Notary Public)

R315-261-170. Use and Management of Containers - Applicability.

Sections R315-261-170 through 179 apply to hazardous secondary materials excluded under the remanufacturing exclusion at Subsection R315-261-4(a)(27) and stored in containers.

R315-261-171. Use and Management of Containers - Condition of Containers.

If a container holding hazardous secondary material is not in good condition, e.g., severe rusting, apparent structural defects, or if it begins to leak, the hazardous secondary material shall be transferred from this container to a container that is in good condition or managed in some other way that complies with the requirements of Rule R315-261.

R315-261-172. Use and Management of Containers - Compatibility Of Hazardous Secondary Materials With Containers.

The container shall be made of or lined with materials which will not react with, and are otherwise compatible with, the hazardous secondary material to be stored, so that the ability of the container to contain the material is not impaired.

R315-261-173. Use and Management of Containers - Management of Containers.

(a) A container holding hazardous secondary material shall always be closed during storage, except when it is necessary to add or remove the hazardous secondary material.

(b) A container holding hazardous secondary material shall not be opened, handled, or stored in a manner which may rupture the container or cause it to leak.

R315-261-175. Use and Management of Containers - Containment.

(a) Container storage areas shall have a containment system that is designed and operated in accordance with Subsection R315-261-175(b).

(b) A containment system shall be designed and operated as follows:

(1) A base shall underlie the containers which is free of cracks or gaps and is sufficiently impervious to contain leaks, spills, and accumulated precipitation until the collected material is detected and removed;

(2) The base shall be sloped or the containment system shall be otherwise designed and operated to drain and remove liquids resulting from leaks, spills, or precipitation, unless the containers are elevated or are otherwise protected from contact with accumulated liquids;

(3) The containment system shall have sufficient capacity to contain 10% of the volume of containers or the volume of the largest container, whichever is greater.

(4) Run-on into the containment system shall be prevented unless the collection system has sufficient excess capacity in addition to that required in Subsection R315-261-175(b)(3) to contain any run-on which might enter the system; and

(5) Spilled or leaked material and accumulated precipitation shall be removed from the sump or collection area in as timely a manner as is necessary to prevent overflow of the collection system.

R315-261-176. Use and Management of Containers - Special Requirements for Ignitable or Reactive Hazardous Secondary Material.

Containers holding ignitable or reactive hazardous secondary material shall be located at least 15 meters (50 feet) from the facility's property line.

R315-261-177. Use and Management of Containers - Special Requirements for Incompatible Materials.

(a) Incompatible materials shall not be placed in the same container.

(b) Hazardous secondary material shall not be placed in an unwashed container that previously held an incompatible material.

(c) A storage container holding a hazardous secondary material that is incompatible with any other materials stored nearby shall be separated from the other materials or protected from them by means of a dike, berm, wall, or other device.

R315-261-179. Use and Management of Containers - Air Emission Standards.

The remanufacturer or other person that stores or treats the hazardous secondary material shall manage all hazardous secondary material placed in a container in accordance with the applicable requirements of Sections R315-261-1030 through 1035, 1050 through 1064 and 1080 through 1089.

R315-261-190. Tank Systems - Applicability.

(a) The requirements of Sections R315-261-190 through 200 apply to tank systems for storing or treating hazardous secondary material excluded under the remanufacturing exclusion at Subsection R315-261-4(a)(27).

(b) Tank systems, including sumps, as defined in Section R315-260-10, that serve as part of a secondary containment system to collect or contain releases of hazardous secondary materials are exempted from the requirements in Subsection R315-261-193(a).

R315-261-191. Tank Systems - Assessment of Existing Tank System's Integrity.

(a) Tank systems shall meet the secondary containment requirements of Section R315-261-193, or the remanufacturer or other person that handles the hazardous secondary material shall determine that the tank system is not leaking or is unfit for use. Except as provided in Subsection R315-261-191(c), a written assessment reviewed and certified by a qualified Professional Engineer shall be kept on file at the remanufacturer's facility or other facility that stores or treats the hazardous secondary material that attests to the tank system's integrity.

(b) This assessment shall determine that the tank system is adequately designed and has sufficient structural strength and compatibility with the material(s) to be stored or treated, to ensure that it will not collapse, rupture, or fail. At a minimum, this assessment shall consider the following:

(1) Design standard(s), if available, according to which the tank and ancillary equipment were constructed;

(2) Hazardous characteristics of the material(s) that have been and will be handled;

(3) Existing corrosion protection measures;

(4) Documented age of the tank system, if available, otherwise, an estimate of the age; and

(5) Results of a leak test, internal inspection, or other tank integrity examination such that:

(i) For non-enterable underground tanks, the assessment shall include a leak test that is capable of taking into account the effects of temperature variations, tank end deflection, vapor pockets, and high water table effects, and

(ii) For other than non-enterable underground tanks and for ancillary equipment, this assessment shall include either a leak test, as described above, or other integrity examination that is certified by a qualified Professional Engineer that addresses cracks, leaks, corrosion, and erosion.

Note to Subsection R315-261-191(b)(5)(ii): The practices described in the American Petroleum Institute (API) Publication, Guide for Inspection of Refinery Equipment, Chapter XIII, "Atmospheric and Low-Pressure Storage Tanks," 4th edition, 1981, may be used, where applicable, as guidelines in conducting other than a leak test.

(c) If, as a result of the assessment conducted in accordance with Subsection R315-261-191(a), a tank system is found to be leaking or unfit for use, the remanufacturer or other person that stores or treats the hazardous secondary material shall comply with the requirements of Section R315-261-196.

R315-261-193. Tank Systems - Containment and Detection of Releases.

(a) Secondary containment systems shall be:

(1) Designed, installed, and operated to prevent any migration of materials or accumulated liquid out of the system to the soil, ground water, or surface water at any time during the use of the tank system; and

(2) Capable of detecting and collecting releases and accumulated liquids until the collected material is removed.

Note to Subsection R315-261-193(a): If the collected material is a hazardous waste under Rule R315-261, it is subject to management as a hazardous waste in accordance with all applicable requirements of Rules R315-262 through 265, 266, and 268. If the collected material is discharged through a point source to waters of the United States, it is subject to the requirements of sections 301, 304, and 402 of the Clean Water

Act, as amended. If discharged to a Publicly Owned Treatment Works (POTW), it is subject to the requirements of section 307 of the Clean Water Act, as amended. If the collected material is released to the environment, it may be subject to the reporting requirements of 40 CFR part 302.

(b) To meet the requirements of Subsection R315-261-193(a), secondary containment systems shall be at a minimum:

(1) Constructed of or lined with materials that are compatible with the materials(s) to be placed in the tank system and shall have sufficient strength and thickness to prevent failure owing to pressure gradients, including static head and external hydrological forces, physical contact with the material to which it is exposed, climatic conditions, and the stress of daily operation, (including stresses from nearby vehicular traffic;

(2) Placed on a foundation or base capable of providing support to the secondary containment system, resistance to pressure gradients above and below the system, and capable of preventing failure due to settlement, compression, or uplift;

(3) Provided with a leak-detection system that is designed and operated so that it will detect the failure of either the primary or secondary containment structure or the presence of any release of hazardous secondary material or accumulated liquid in the secondary containment system at the earliest practicable time; and

(4) Sloped or otherwise designed or operated to drain and remove liquids resulting from leaks, spills, or precipitation. Spilled or leaked material and accumulated precipitation shall be removed from the secondary containment system within 24 hours, or in as timely a manner as is possible to prevent harm to human health and the environment.

(c) Secondary containment for tanks shall include one or more of the following devices:

(1) A liner, external to the tank;

(2) A vault; or

(3) A double-walled tank.

(d) In addition to the requirements of Subsections R315-261-193(a), (b), and (c), secondary containment systems shall satisfy the following requirements:

(1) External liner systems shall be:

(i) Designed or operated to contain 100 percent of the capacity of the largest tank within its boundary;

(ii) Designed or operated to prevent run-on or infiltration of precipitation into the secondary containment system unless the collection system has sufficient excess capacity to contain run-on or infiltration. Such additional capacity shall be sufficient to contain precipitation from a 25-year, 24-hour rainfall event.

(iii) Free of cracks or gaps; and

(iv) Designed and installed to surround the tank completely and to cover all surrounding earth likely to come into contact with the material if the material is released from the tank(s), i.e., capable of preventing lateral as well as vertical migration of the material.

(2) Vault systems shall be:

(i) Designed or operated to contain 100 percent of the capacity of the largest tank within its boundary;

(ii) Designed or operated to prevent run-on or infiltration of precipitation into the secondary containment system unless the collection system has sufficient excess capacity to contain run-on or infiltration. Such additional capacity shall be sufficient to contain precipitation from a 25-year, 24-hour rainfall event;

(iii) Constructed with chemical-resistant water stops in place at all joints, if any;

(iv) Provided with an impermeable interior coating or lining that is compatible with the stored material and that will prevent migration of material into the concrete;

(v) Provided with a means to protect against the formation

of and ignition of vapors within the vault, if the material being stored or treated is ignitable or reactive; and

(vi) Provided with an exterior moisture barrier or be otherwise designed or operated to prevent migration of moisture into the vault if the vault is subject to hydraulic pressure.

(3) Double-walled tanks shall be:

(i) Designed as an integral structure, i.e., an inner tank completely enveloped within an outer shell, so that any release from the inner tank is contained by the outer shell;

(ii) Protected, if constructed of metal, from both corrosion of the primary tank interior and of the external surface of the outer shell; and

(iii) Provided with a built-in continuous leak detection system capable of detecting a release within 24 hours, or at the earliest practicable time.

Note to Subsection R315-261-193(d)(3): The provisions outlined in the Steel Tank Institute's (STI) "Standard for Dual Wall Underground Steel Storage Tanks" may be used as guidelines for aspects of the design of underground steel double-walled tanks.

(e) Reserved

(f) Ancillary equipment shall be provided with secondary containment, e.g., trench, jacketing, double-walled piping, that meets the requirements of Subsections R315-261-193(a) and (b) except for:

(1) Aboveground piping, exclusive of flanges, joints, valves, and other connections, that are visually inspected for leaks on a daily basis;

(2) Welded flanges, welded joints, and welded connections that are visually inspected for leaks on a daily basis;

(3) Sealless or magnetic coupling pumps and sealless valves that are visually inspected for leaks on a daily basis; and

(4) Pressurized aboveground piping systems with automatic shut-off devices, e.g., excess flow check valves, flow metering shutdown devices, loss of pressure actuated shut-off devices, that are visually inspected for leaks on a daily basis.

R315-261-194. Tank Systems - General Operating Requirements.

(a) Hazardous secondary materials or treatment reagents shall not be placed in a tank system if they could cause the tank, its ancillary equipment, or the containment system to rupture, leak, corrode, or otherwise fail.

(b) The remanufacturer or other person that stores or treats the hazardous secondary material shall use appropriate controls and practices to prevent spills and overflows from tank or containment systems. These include at a minimum:

(1) Spill prevention controls, e.g., check valves, dry disconnect couplings;

(2) Overfill prevention controls, e.g., level sensing devices, high level alarms, automatic feed cutoff, or bypass to a standby tank; and

(3) Maintenance of sufficient freeboard in uncovered tanks to prevent overtopping by wave or wind action or by precipitation.

(c) The remanufacturer or other person that stores or treats the hazardous secondary material shall comply with the requirements of Section R315-261-196 if a leak or spill occurs in the tank system.

R315-261-196. Tank Systems - Response To Leaks or Spills and Disposition of Leaking or Unfit-For-Use Tank Systems.

A tank system or secondary containment system from which there has been a leak or spill, or which is unfit for use, shall be removed from service immediately, and the remanufacturer or other person that stores or treats the hazardous secondary material shall satisfy the following requirements:

(a) Cessation of use; prevent flow or addition of materials.

The remanufacturer or other person that stores or treats the hazardous secondary material shall immediately stop the flow of hazardous secondary material into the tank system or secondary containment system and inspect the system to determine the cause of the release.

(b) Removal of material from tank system or secondary containment system.

(1) If the release was from the tank system, the remanufacturer or other person that stores or treats the hazardous secondary material shall, within 24 hours after detection of the leak or, if the remanufacturer or other person that stores or treats the hazardous secondary material demonstrates that it is not possible, at the earliest practicable time, remove as much of the material as is necessary to prevent further release of hazardous secondary material to the environment and to allow inspection and repair of the tank system to be performed.

(2) If the material released was to a secondary containment system, all released materials shall be removed within 24 hours or in as timely a manner as is possible to prevent harm to human health and the environment.

(c) Containment of visible releases to the environment. The remanufacturer or other person that stores or treats the hazardous secondary material shall immediately conduct a visual inspection of the release and, based upon that inspection:

(1) Prevent further migration of the leak or spill to soils or surface water; and

(2) Remove, and properly dispose of, any visible contamination of the soil or surface water.

(d) Notifications, reports.

(1) Any release to the environment, except as provided in Subsection R315-261-196(d)(2), shall be reported to the Director within 24 hours of its detection. If the release has been reported pursuant to 40 CFR part 302, that report will satisfy this requirement.

(2) A leak or spill of hazardous secondary material is exempted from the requirements of Subsection R315-261-196(d) if it is:

(i) Less than or equal to a quantity of 1 pound, and

(ii) Immediately contained and cleaned up.

(3) Within 30 days of detection of a release to the environment, a report containing the following information shall be submitted to the Director:

(i) Likely route of migration of the release;

(ii) Characteristics of the surrounding soil, soil composition, geology, hydrogeology, climate;

(iii) Results of any monitoring or sampling conducted in connection with the release, if available. If sampling or monitoring data relating to the release are not available within 30 days, these data shall be submitted to the Director as soon as they become available.

(iv) Proximity to downgradient drinking water, surface water, and populated areas; and

(v) Description of response actions taken or planned.

(e) Provision of secondary containment, repair, or closure.

(1) Unless the remanufacturer or other person that stores or treats the hazardous secondary material satisfies the requirements of Subsections R315-261-196(e)(2) through (4), the tank system shall cease to operate under the remanufacturing exclusion at Subsection R315-261-4(a)(27).

(2) If the cause of the release was a spill that has not damaged the integrity of the system, the remanufacturer or other person that stores or treats the hazardous secondary material may return the system to service as soon as the released material is removed and repairs, if necessary, are made.

(3) If the cause of the release was a leak from the primary tank system into the secondary containment system, the system shall be repaired prior to returning the tank system to service.

(4) If the source of the release was a leak to the

environment from a component of a tank system without secondary containment, the remanufacturer or other person that stores or treats the hazardous secondary material shall provide the component of the system from which the leak occurred with secondary containment that satisfies the requirements of Section R315-261-193 before it can be returned to service, unless the source of the leak is an aboveground portion of a tank system that can be inspected visually. If the source is an aboveground component that can be inspected visually, the component shall be repaired and may be returned to service without secondary containment as long as the requirements of Subsection R315-261-196(f) are satisfied. Additionally, if a leak has occurred in any portion of a tank system component that is not readily accessible for visual inspection, e.g., the bottom of an inground or onground tank, the entire component shall be provided with secondary containment in accordance with Section R315-261-193 prior to being returned to use.

(f) Certification of major repairs. If the remanufacturer or other person that stores or treats the hazardous secondary material has repaired a tank system in accordance with Subsection R315-261-196(e), and the repair has been extensive, e.g., installation of an internal liner; repair of a ruptured primary containment or secondary containment vessel, the tank system shall not be returned to service unless the remanufacturer or other person that stores or treats the hazardous secondary material has obtained a certification by a qualified Professional Engineer that the repaired system is capable of handling hazardous secondary materials without release for the intended life of the system. This certification shall be kept on file at the facility and maintained until closure of the facility.

Note 1 to Section R315-261-196: The Director may, on the basis of any information received that there is or has been a release of hazardous secondary material or hazardous constituents into the environment, issue an order under RCRA section 7003(a) requiring corrective action or such other response as deemed necessary to protect human health or the environment.

Note 2 to Section R315-261-196: 40 CFR part 302 may require the owner or operator to notify the National Response Center of certain releases.

R315-261-197. Tank Systems - Termination of Remanufacturing Exclusion.

Hazardous secondary material stored in units more than 90 days after the unit ceases to operate under the remanufacturing exclusion at Subsection R315-261-4(a)(27) or otherwise ceases to be operated for manufacturing, or for storage of a product or a raw material, then becomes subject to regulation as hazardous waste under Rules R315-261 through 266, 268, 270, and 124, as applicable.

R315-261-198. Tank Systems - Special Requirements for Ignitable or Reactive Materials.

(a) Ignitable or reactive material shall not be placed in tank systems, unless the material is stored or treated in such a way that it is protected from any material or conditions that may cause the material to ignite or react.

(b) The remanufacturer or other person that stores or treats hazardous secondary material which is ignitable or reactive shall store or treat the hazardous secondary material in a tank that is in compliance with the requirements for the maintenance of protective distances between the material management area and any public ways, streets, alleys, or an adjoining property line that can be built upon as required in Tables 2-1 through 2-6 of the National Fire Protection Association's "Flammable and Combustible Liquids Code," (1977 or 1981), incorporated by reference, see Section R315-260-11.

R315-261-199. Tank Systems - Special Requirements for

Incompatible Materials.

(a) Incompatible materials shall not be placed in the same tank system.

(b) Hazardous secondary material shall not be placed in a tank system that has not been decontaminated and that previously held an incompatible material.

R315-261-200. Tank Systems - Air Emission Standards.

The remanufacturer or other person that stores or treats the hazardous secondary material shall manage all hazardous secondary material placed in a tank in accordance with the applicable requirements of Sections R315-261-1030 through 1035, 1050 through 1064, and 1080 through 1089.

R315-261-400. Emergency Preparedness and Response for Management of Excluded Hazardous Secondary Materials - Applicability.

The requirements of Sections R315-261-400, 410, 411, and 420 apply to those areas of an entity managing hazardous secondary materials excluded under Subsection R315-261-4(a)(23) and/or (24) where hazardous secondary materials are generated or accumulated on site.

(a) A generator of hazardous secondary material, or an intermediate or reclamation facility operating under a verified recycler exclusion under Subsection R315-260-31(d), that accumulates 6000 kg or less of hazardous secondary material at any time shall comply with Sections R315-261-410 and 411.

(b) A generator of hazardous secondary material, or an intermediate or reclamation facility operating under a verified recycler exclusion under Subsection R315-260-31(d) that accumulates more than 6000 kg of hazardous secondary material at any time shall comply with Sections R315-261-410 and 420.

R315-261-410. Emergency Preparedness and Response for Management of Excluded Hazardous Secondary Materials - Preparedness and Prevention.

(a) Maintenance and operation of facility. Facilities generating or accumulating hazardous secondary material shall be maintained and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous secondary materials or hazardous secondary material constituents to air, soil, or surface water which could threaten human health or the environment.

(b) Required equipment. All facilities generating or accumulating hazardous secondary material shall be equipped with the following, unless none of the hazards posed by hazardous secondary material handled at the facility could require a particular kind of equipment specified below:

(1) An internal communications or alarm system capable of providing immediate emergency instruction, voice or signal, to facility personnel;

(2) A device, such as a telephone, immediately available at the scene of operations, or a hand-held two-way radio, capable of summoning emergency assistance from local police departments, fire departments, or state or local emergency response teams;

(3) Portable fire extinguishers, fire control equipment, including special extinguishing equipment, such as that using foam, inert gas, or dry chemicals, spill control equipment, and decontamination equipment; and

(4) Water at adequate volume and pressure to supply water hose streams, or foam producing equipment, or automatic sprinklers, or water spray systems.

(c) Testing and maintenance of equipment. All facility communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, where required, shall be tested and maintained as necessary to assure its proper operation in time of emergency.

(d) Access to communications or alarm system.

(1) Whenever hazardous secondary material is being poured, mixed, spread, or otherwise handled, all personnel involved in the operation shall have immediate access to an internal alarm or emergency communication device, either directly or through visual or voice contact with another employee, unless such a device is not required under Subsection R315-261-410(b).

(2) If there is ever just one employee on the premises while the facility is operating, he shall have immediate access to a device, such as a telephone, immediately available at the scene of operation, or a hand-held two-way radio, capable of summoning external emergency assistance, unless such a device is not required under Subsection R315-261-410(b).

(e) Required aisle space. The hazardous secondary material generator or intermediate or reclamation facility operating under a verified recycler exclusion under Subsection R315-260-31(d) shall maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency, unless aisle space is not needed for any of these purposes.

(f) Arrangements with local authorities.

(1) The hazardous secondary material generator or an intermediate or reclamation facility operating under a verified recycler exclusion under Subsection R315-260-31(d) shall attempt to make the following arrangements, as appropriate for the type of waste handled at his facility and the potential need for the services of these organizations:

(i) Arrangements to familiarize police, fire departments, and emergency response teams with the layout of the facility, properties of hazardous secondary material handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to roads inside the facility, and possible evacuation routes;

(ii) Where more than one police and fire department might respond to an emergency, agreements designating primary emergency authority to a specific police and a specific fire department, and agreements with any others to provide support to the primary emergency authority;

(iii) Agreements with state emergency response teams, emergency response contractors, and equipment suppliers; and

(iv) Arrangements to familiarize local hospitals with the properties of hazardous secondary material handled at the facility and the types of injuries or illnesses which could result from fires, explosions, or releases at the facility.

(2) Where state or local authorities decline to enter into such arrangements, the hazardous secondary material generator or an intermediate or reclamation facility operating under a verified recycler exclusion under Subsection R315-260-31(d) shall document the refusal in the operating record.

R315-261-411. Emergency Preparedness and Response for Management of Excluded Hazardous Secondary Materials - Emergency Procedures for Facilities Generating or Accumulating 6000 Kg or Less of Hazardous Secondary Material.

A generator or an intermediate or reclamation facility operating under a verified recycler exclusion under Subsection R315-260-31(d) that generates or accumulates 6000 kg or less of hazardous secondary material shall comply with the following requirements:

(a) At all times there shall be at least one employee either on the premises or on call, i.e., available to respond to an emergency by reaching the facility within a short period of time, with the responsibility for coordinating all emergency response measures specified in Subsection R315-261-411(d). This employee is the emergency coordinator.

(b) The generator or intermediate or reclamation facility operating under a verified recycler exclusion under Subsection

R315-260-31(d) shall post the following information next to the telephone:

(1) The name and telephone number of the emergency coordinator;

(2) Location of fire extinguishers and spill control material, and, if present, fire alarm; and

(3) The telephone number of the fire department, unless the facility has a direct alarm.

(c) The generator or an intermediate or reclamation facility operating under a verified recycler exclusion under Subsection R315-260-31(d) shall ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures, relevant to their responsibilities during normal facility operations and emergencies;

(d) The emergency coordinator or his designee shall respond to any emergencies that arise. The applicable responses are as follows:

(1) In the event of a fire, call the fire department or attempt to extinguish it using a fire extinguisher;

(2) In the event of a spill, contain the flow of hazardous waste to the extent possible, and as soon as is practicable, clean up the hazardous waste and any contaminated materials or soil;

(3) In the event of a fire, explosion, or other release which could threaten human health outside the facility or when the generator or an intermediate or reclamation facility operating under a verified recycler exclusion under Subsection R315-260-31(d) has knowledge that a spill has reached surface water, the generator or an intermediate or reclamation facility operating under a verified recycler exclusion under Subsection R315-260-31(d) shall immediately notify the National Response Center, using their 24-hour toll free number 800/424-8802 and follow the requirements Section R316-263-33. The report shall include the following information:

(i) The name, address, and U.S. EPA Identification Number of the facility;

(ii) Date, time, and type of incident, e.g., spill or fire;

(iii) Quantity and type of hazardous waste involved in the incident;

(iv) Extent of injuries, if any; and

(v) Estimated quantity and disposition of recovered materials, if any.

R315-261-420. Emergency Preparedness and Response for Management of Excluded Hazardous Secondary Materials - Contingency Planning and Emergency Procedures for Facilities Generating or Accumulating More Than 6000 Kg of Hazardous Secondary Material.

A generator or an intermediate or reclamation facility operating under a verified recycler exclusion under Subsection R315-260-31(d) that generates or accumulates more than 6000 kg of hazardous secondary material shall comply with the following requirements:

(a) Purpose and implementation of contingency plan.

(1) Each generator or an intermediate or reclamation facility operating under a verified recycler exclusion under Subsection R315-260-31(d) that accumulates more than 6000 kg of hazardous secondary material shall have a contingency plan for his facility. The contingency plan shall be designed to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden release of hazardous secondary material or hazardous secondary material constituents to air, soil, or surface water.

(2) The provisions of the plan shall be carried out immediately whenever there is a fire, explosion, or release of hazardous secondary material or hazardous secondary material constituents which could threaten human health or the environment.

(b) Content of contingency plan.

(1) The contingency plan shall describe the actions facility

personnel shall take to comply with Subsection R315-261-420(a) and (f) in response to fires, explosions, or any unplanned sudden or non-sudden release of hazardous secondary material or hazardous secondary material constituents to air, soil, or surface water at the facility.

(2) If the generator or an intermediate or reclamation facility operating under a verified recycler exclusion under Subsection R315-260-31(d) accumulating more than 6000 kg of hazardous secondary material has already prepared a Spill Prevention, Control, and Countermeasures (SPCC) Plan in accordance with 40 CFR 112, or some other emergency or contingency plan, he need only amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with the requirements of Rule R315-261. The hazardous secondary material generator or an intermediate or reclamation facility operating under a verified recycler exclusion under Subsection R315-260-31(d) may develop one contingency plan which meets all regulatory requirements. The Director recommends that the plan be based on the National Response Team's Integrated Contingency Plan Guidance ("One Plan"). When modifications are made to non-hazardous waste provisions in an integrated contingency plan, the changes do not trigger the need for a hazardous waste permit modification.

(3) The plan shall describe arrangements agreed to by local police departments, fire departments, hospitals, contractors, and State and local emergency response teams to coordinate emergency services, pursuant to Subsection R315-262-410(f).

(4) The plan shall list names, addresses, and phone numbers, office and home, of all persons qualified to act as emergency coordinator, see Subsection R315-261-420(e), and this list shall be kept up-to-date. Where more than one person is listed, one shall be named as primary emergency coordinator and others shall be listed in the order in which they shall assume responsibility as alternates.

(5) The plan shall include a list of all emergency equipment at the facility, such as fire extinguishing systems, spill control equipment, communications and alarm systems, internal and external, and decontamination equipment, where this equipment is required. This list shall be kept up to date. In addition, the plan shall include the location and a physical description of each item on the list, and a brief outline of its capabilities.

(6) The plan shall include an evacuation plan for facility personnel where there is a possibility that evacuation could be necessary. This plan shall describe signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes, in cases where the primary routes could be blocked by releases of hazardous waste or fires.

(c) Copies of contingency plan. A copy of the contingency plan and all revisions to the plan shall be:

(1) Maintained at the facility; and

(2) Submitted to all local police departments, fire departments, hospitals, and State and local emergency response teams that may be called upon to provide emergency services.

(d) Amendment of contingency plan. The contingency plan shall be reviewed, and immediately amended, if necessary, whenever:

(1) Applicable regulations are revised;

(2) The plan fails in an emergency;

(3) The facility changes-in its design, construction, operation, maintenance, or other circumstances-in a way that materially increases the potential for fires, explosions, or releases of hazardous secondary material or hazardous secondary material constituents, or changes the response necessary in an emergency;

(4) The list of emergency coordinators changes; or

(5) The list of emergency equipment changes.

(e) Emergency coordinator. At all times, there shall be at

least one employee either on the facility premises or on call, i.e., available to respond to an emergency by reaching the facility within a short period of time, with the responsibility for coordinating all emergency response measures. This emergency coordinator shall be thoroughly familiar with all aspects of the facility's contingency plan, all operations and activities at the facility, the location and characteristics of hazardous secondary material handled, the location of all records within the facility, and the facility layout. In addition, this person shall have the authority to commit the resources needed to carry out the contingency plan. The emergency coordinator's responsibilities are more fully spelled out in Subsection R315-261-420(f). Applicable responsibilities for the emergency coordinator vary, depending on factors such as type and variety of hazardous secondary material(s) handled by the facility, and type and complexity of the facility.

(f) Emergency procedures.

(1) Whenever there is an imminent or actual emergency situation, the emergency coordinator, or his designee when the emergency coordinator is on call, shall immediately:

(i) Activate internal facility alarms or communication systems, where applicable, to notify all facility personnel; and

(ii) Notify appropriate State or local agencies with designated response roles if their help is needed.

(2) Whenever there is a release, fire, or explosion, the emergency coordinator shall immediately identify the character, exact source, amount, and areal extent of any released materials. The emergency coordinator may do this by observation or review of facility records or manifests and, if necessary, by chemical analysis.

(3) Concurrently, the emergency coordinator shall assess possible hazards to human health or the environment that may result from the release, fire, or explosion. This assessment shall consider both direct and indirect effects of the release, fire, or explosion, e.g., the effects of any toxic, irritating, or asphyxiating gases that are generated, or the effects of any hazardous surface water run-offs from water or chemical agents used to control fire and heat-induced explosions.

(4) If the emergency coordinator determines that the facility has had a release, fire, or explosion which could threaten human health, or the environment, outside the facility, he shall report his findings as follows:

(i) If his assessment indicates that evacuation of local areas may be advisable, the emergency coordinator shall immediately notify appropriate local authorities. The emergency coordinator shall be available to help appropriate officials decide whether local areas should be evacuated; and

(ii) The emergency coordinator shall immediately notify the Utah Department of Environmental Quality 24 hour answering service at 801/536-4123, and the National Response Center, using their 24-hour toll free number 800/424-8802. The report shall include:

(A) Name and telephone number of reporter;

(B) Name and address of facility;

(C) Time and type of incident, e.g., release, fire;

(D) Name and quantity of material(s) involved, to the extent known;

(E) The extent of injuries, if any; and

(F) The possible hazards to human health, or the environment, outside the facility.

(5) During an emergency, the emergency coordinator shall take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other hazardous secondary material at the facility. These measures shall include, where applicable, stopping processes and operations, collecting and containing released material, and removing or isolating containers.

(6) If the facility stops operations in response to a fire, explosion or release, the emergency coordinator shall monitor

for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, wherever this is appropriate.

(7) Immediately after an emergency, the emergency coordinator shall provide for treating, storing, or disposing of recovered secondary material, contaminated soil or surface water, or any other material that results from a release, fire, or explosion at the facility. Unless the hazardous secondary material generator can demonstrate, in accordance with Subsections R315-261-3(c) or (d), that the recovered material is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and shall manage it in accordance with all applicable requirements of Rules R315-262, 263, and 265.

(8) The emergency coordinator shall ensure that, in the affected area(s) of the facility:

(i) No secondary material that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed; and

(ii) All emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.

(9) The hazardous secondary material generator shall note in the operating record the time, date, and details of any incident that requires implementing the contingency plan. Within 15 days after the incident, he shall submit a written report on the incident to the Director. The report shall include:

(i) Name, address, and telephone number of the hazardous secondary material generator;

(ii) Name, address, and telephone number of the facility;

(iii) Date, time, and type of incident, e.g., fire, explosion;

(iv) Name and quantity of material(s) involved;

(v) The extent of injuries, if any;

(vi) An assessment of actual or potential hazards to human health or the environment, where this is applicable; and

(vii) Estimated quantity and disposition of recovered material that resulted from the incident.

(g) Personnel training. All employees must be thoroughly familiar with proper waste handling and emergency procedures relevant to their responsibilities during normal facility operations and emergencies.

R315-261-1030. Air Emission Standards for Process Vents - Applicability.

The regulations in Sections R315-261-1030 through 1035 apply to process vents associated with distillation, fractionation, thin-film evaporation, solvent extraction, or air or stream stripping operations that manage hazardous secondary materials excluded under the remanufacturing exclusion at Subsection R315-261-4(a)(27) with concentrations of at least 10 ppmw, unless the process vents are equipped with operating air emission controls in accordance with the requirements of an applicable Clean Air Act regulation codified under 40 CFR part 60, part 61, or part 63.

R315-261-1031. Air Emission Standards for Process Vents - Definitions.

(a) As used in Sections R315-261-1030 through 1035, all terms not defined herein shall have the meaning given them in the Resource Conservation and Recovery Act, the Utah Solid and Hazardous Waste Act, and Rules R315-260 through 266.

(1) "Air stripping operation" is a desorption operation employed to transfer one or more volatile components from a liquid mixture into a gas either with or without the application of heat to the liquid. Packed towers, spray towers, and bubble-cap, sieve, or valve-type plate towers are among the process configurations used for contacting the air and a liquid.

(2) "Bottoms receiver" means a container or tank used to receive and collect the heavier bottoms fractions of the distillation feed stream that remain in the liquid phase.

(3) "Closed-vent system" means a system that is not open to the atmosphere and that is composed of piping, connections, and, if necessary, flow-inducing devices that transport gas or vapor from a piece or pieces of equipment to a control device.

(4) "Condenser" means a heat-transfer device that reduces a thermodynamic fluid from its vapor phase to its liquid phase.

(5) "Connector" means flanged, screwed, welded, or other joined fittings used to connect two pipelines or a pipeline and a piece of equipment. For the purposes of reporting and recordkeeping, connector means flanged fittings that are not covered by insulation or other materials that prevent location of the fittings.

(6) "Continuous recorder" means a data-recording device recording an instantaneous data value at least once every 15 minutes.

(7) "Control device" means an enclosed combustion device, vapor recovery system, or flare. Any device the primary function of which is the recovery or capture of solvents or other organics for use, reuse, or sale, e.g., a primary condenser on a solvent recovery unit, is not a control device.

(8) "Control device shutdown" means the cessation of operation of a control device for any purpose.

(9) "Distillate receiver" means a container or tank used to receive and collect liquid material, condensed, from the overhead condenser of a distillation unit and from which the condensed liquid is pumped to larger storage tanks or other process units.

(10) "Distillation operation" means an operation, either batch or continuous, separating one or more feed stream(s) into two or more exit streams, each exit stream having component concentrations different from those in the feed stream(s). The separation is achieved by the redistribution of the components between the liquid and vapor phase as they approach equilibrium within the distillation unit.

(11) "Double block and bleed system" means two block valves connected in series with a bleed valve or line that can vent the line between the two block valves.

(12) "Equipment" means each valve, pump, compressor, pressure relief device, sampling connection system, open-ended valve or line, or flange or other connector, and any control devices or systems required by Sections R315-261-1030 through 1035.

(13) "Flame zone" means the portion of the combustion chamber in a boiler occupied by the flame envelope.

(14) "Flow indicator" means a device that indicates whether gas flow is present in a vent stream.

(15) "First attempt at repair" means to take rapid action for the purpose of stopping or reducing leakage of organic material to the atmosphere using best practices.

(16) "Fractionation operation" means a distillation operation or method used to separate a mixture of several volatile components of different boiling points in successive stages, each stage removing from the mixture some proportion of one of the components.

(17) "Hazardous secondary material management unit shutdown" means a work practice or operational procedure that stops operation of a hazardous secondary material management unit or part of a hazardous secondary material management unit. An unscheduled work practice or operational procedure that stops operation of a hazardous secondary material management unit or part of a hazardous secondary material management unit for less than 24 hours is not a hazardous secondary material management unit shutdown. The use of spare equipment and technically feasible bypassing of equipment without stopping operation are not hazardous secondary material management unit shutdowns.

(18) "Hot well" means a container for collecting condensate as in a steam condenser serving a vacuum-jet or steam-jet ejector.

(19) "In gas/vapor service" means that the piece of equipment contains or contacts a hazardous secondary material stream that is in the gaseous state at operating conditions.

(20) "In heavy liquid service" means that the piece of equipment is not in gas/vapor service or in light liquid service.

(21) "In light liquid service" means that the piece of equipment contains or contacts a material stream where the vapor pressure of one or more of the organic components in the stream is greater than 0.3 kilopascals (kPa) at 20 degrees C, the total concentration of the pure organic components having a vapor pressure greater than 0.3 kilopascals (kPa) at 20 degrees C is equal to or greater than 20 percent by weight, and the fluid is a liquid at operating conditions.

(22) "In situ sampling systems" means nonextractive samplers or in-line samplers.

(23) "In vacuum service" means that equipment is operating at an internal pressure that is at least 5 kPa below ambient pressure.

(24) "Malfunction" means any sudden failure of a control device or a hazardous secondary material management unit or failure of a hazardous secondary material management unit to operate in a normal or usual manner, so that organic emissions are increased.

(25) "Open-ended valve or line" means any valve, except pressure relief valves, having one side of the valve seat in contact with hazardous secondary material and one side open to the atmosphere, either directly or through open piping.

(26) "Pressure release" means the emission of materials resulting from the system pressure being greater than the set pressure of the pressure relief device.

(27) "Process heater" means a device that transfers heat liberated by burning fuel to fluids contained in tubes, including all fluids except water that are heated to produce steam.

(28) "Process vent" means any open-ended pipe or stack that is vented to the atmosphere either directly, through a vacuum-producing system, or through a tank, e.g., distillate receiver, condenser, bottoms receiver, surge control tank, separator tank, or hot well, associated with hazardous secondary material distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations.

(29) "Repaired" means that equipment is adjusted, or otherwise altered, to eliminate a leak.

(30) "Sampling connection system" means an assembly of equipment within a process or material management unit used during periods of representative operation to take samples of the process or material fluid. Equipment used to take non-routine grab samples is not considered a sampling connection system.

(31) "Sensor" means a device that measures a physical quantity or the change in a physical quantity, such as temperature, pressure, flow rate, pH, or liquid level.

(32) "Separator tank" means a device used for separation of two immiscible liquids.

(33) "Solvent extraction operation" means an operation or method of separation in which a solid or solution is contacted with a liquid solvent, the two being mutually insoluble, to preferentially dissolve and transfer one or more components into the solvent.

(34) "Startup" means the setting in operation of a hazardous secondary material management unit or control device for any purpose.

(35) "Steam stripping operation" means a distillation operation in which vaporization of the volatile constituents of a liquid mixture takes place by the introduction of steam directly into the charge.

(36) "Surge control tank" means a large-sized pipe or storage reservoir sufficient to contain the surging liquid discharge of the process tank to which it is connected.

(37) "Thin-film evaporation operation" means a distillation operation that employs a heating surface consisting of a large

diameter tube that may be either straight or tapered, horizontal or vertical. Liquid is spread on the tube wall by a rotating assembly of blades that maintain a close clearance from the wall or actually ride on the film of liquid on the wall.

(38) "Vapor incinerator" means any enclosed combustion device that is used for destroying organic compounds and does not extract energy in the form of steam or process heat.

(39) "Vented" means discharged through an opening, typically an open-ended pipe or stack, allowing the passage of a stream of liquids, gases, or fumes into the atmosphere. The passage of liquids, gases, or fumes is caused by mechanical means such as compressors or vacuum-producing systems or by process-related means such as evaporation produced by heating and not caused by tank loading and unloading, working losses, or by natural means such as diurnal temperature changes.

R315-261-1032. Air Emission Standards for Process Vents - Process Vents.

(a) The remanufacturer or other person that stores or treats hazardous secondary materials in hazardous secondary material management units with process vents associated with distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations managing hazardous secondary material with organic concentrations of at least 10 ppmw shall either:

(1) Reduce total organic emissions from all affected process vents at the facility below 1.4 kg/h (3 lb/h) and 2.8 Mg/yr (3.1 tons/yr), or

(2) Reduce, by use of a control device, total organic emissions from all affected process vents at the facility by 95 weight percent.

(b) If the remanufacturer or other person that stores or treats the hazardous secondary material installs a closed-vent system and control device to comply with the provisions of Subsection R315-261-1032(a) the closed-vent system and control device shall meet the requirements of Section R315-261-1033.

(c) Determinations of vent emissions and emission reductions or total organic compound concentrations achieved by add-on control devices may be based on engineering calculations or performance tests. If performance tests are used to determine vent emissions, emission reductions, or total organic compound concentrations achieved by add-on control devices, the performance tests shall conform with the requirements of Subsection R315-261-1034(c).

(d) When a remanufacturer or other person that stores or treats the hazardous secondary material and the Director do not agree on determinations of vent emissions and/or emission reductions or total organic compound concentrations achieved by add-on control devices based on engineering calculations, the procedures in Subsection R315-261-1034(c) shall be used to resolve the disagreement.

R315-261-1033. Air Emission Standards for Process Vents - Closed-Vent Systems and Control Devices.

(a)(1) The remanufacturer or other person that stores or treats the hazardous secondary materials in hazardous secondary material management units using closed-vent systems and control devices used to comply with provisions of Rule R315-261 shall comply with the provisions of Sections R315-261-1033.

(2) Reserved

(b) A control device involving vapor recovery, e.g., a condenser or adsorber, shall be designed and operated to recover the organic vapors vented to it with an efficiency of 95 weight percent or greater unless the total organic emission limits of Subsection R315-261-1032(a)(1) for all affected process vents can be attained at an efficiency less than 95 weight percent.

(c) An enclosed combustion device, e.g., a vapor

incinerator, boiler, or process heater, shall be designed and operated to reduce the organic emissions vented to it by 95 weight percent or greater; to achieve a total organic compound concentration of 20 ppmv, expressed as the sum of the actual compounds, not carbon equivalents, on a dry basis corrected to 3 percent oxygen; or to provide a minimum residence time of 0.50 seconds at a minimum temperature of 760 deg. C. If a boiler or process heater is used as the control device, then the vent stream shall be introduced into the flame zone of the boiler or process heater.

(d)(1) A flare shall be designed for and operated with no visible emissions as determined by the methods specified in Subsection R315-261-1033(e)(1), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

(2) A flare shall be operated with a flame present at all times, as determined by the methods specified in Subsection R315-261-1033(f)(2)(iii).

(3) A flare shall be used only if the net heating value of the gas being combusted is 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or if the net heating value of the gas being combusted is 7.45 MJ/scm (200 Btu/scf) or greater if the flare is nonassisted. The net heating value of the gas being combusted shall be determined by the methods specified in Subsection R315-261-1033(e)(2).

(4)(i) A steam-assisted or nonassisted flare shall be designed for and operated with an exit velocity, as determined by the methods specified in Subsection R315-261-1033(e)(3), less than 18.3 m/s (60 ft/s), except as provided in Subsections R315-261-1033(d)(4)(ii) and (iii).

(ii) A steam-assisted or nonassisted flare designed for and operated with an exit velocity, as determined by the methods specified in Subsection R315-261-1033(e)(3), equal to or greater than 18.3 m/s (60 ft/s) but less than 122 m/s (400 ft/s) is allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).

(iii) A steam-assisted or nonassisted flare designed for and operated with an exit velocity, as determined by the methods specified in Subsection R315-261-1033(e)(3), less than the velocity, V_{max} , as determined by the method specified in Subsection R315-261-1033(e)(4) and less than 122 m/s (400 ft/s) is allowed.

(5) An air-assisted flare shall be designed and operated with an exit velocity less than the velocity, V_{max} , as determined by the method specified in Subsection R315-261-1033(e)(5).

(6) A flare used to comply with Section R315-261-1033 shall be steam-assisted, air-assisted, or nonassisted.

(e)(1) Reference Method 22 in 40 CFR part 60 shall be used to determine the compliance of a flare with the visible emission provisions of Sections R315-261-1030 through 1035. The observation period is 2 hours and shall be used according to Method 22.

(2) The net heating value of the gas being combusted in a flare shall be calculated using the following equation: The equation found in 40 CFR 261.1033(e)(2) 2015 ed is adopted and incorporated by reference.

Where:

H_i = Net heating value of the sample, MJ/scm; where the net enthalpy per mole of offgas is based on combustion at 25 degrees C and 760 mm Hg, but the standard temperature for determining the volume corresponding to 1 mol is 20 degrees C;

K = Constant, 1.74×10^{-7} (1/ppm) (g mol/scm) (MJ/kcal) where standard temperature for (g mol/scm) is 20 deg. C;

C_i = Concentration of sample component i in ppm on a wet basis, as measured for organics by Reference Method 18 in 40 CFR part 60 and measured for hydrogen and carbon monoxide by ASTM D 1946-82, incorporated by reference as specified in Section R315-260-11; and

H_i = Net heat of combustion of sample component i , kcal/9 mol at 25 degrees C and 760 mm Hg. The heats of combustion

may be determined using ASTM D 2382-83, incorporated by reference as specified in Section R315-260-11, if published values are not available or cannot be calculated.

(3) The actual exit velocity of a flare shall be determined by dividing the volumetric flow rate, in units of standard temperature and pressure, as determined by Reference Methods 2, 2A, 2C, or 2D in 40 CFR part 60 as appropriate, by the unobstructed, free, cross-sectional area of the flare tip.

(4) The maximum allowed velocity in m/s, V_{max} , for a flare complying with Subsection R315-261-1033(d)(4)(iii) shall be determined by the following equation:

$$\text{Log}_{10}(V_{max}) = (H_T + 28.8)/31.7$$

Where:

28.8 = Constant,

31.7 = Constant,

H_T = The net heating value as determined in Subsection R315-261-1033(e)(2).

(5) The maximum allowed velocity in m/s, V_{max} , for an air-assisted flare shall be determined by the following equation:

$$V_{max} = 8.706 + 0.7084 (H_T)$$

Where:

8.706 = Constant,

0.7084 = Constant,

H_T = The net heating value as determined in Subsection R315-261-1033(e)(2).

(f) The remanufacturer or other person that stores or treats the hazardous secondary material shall monitor and inspect each control device required to comply with Section R315-261-1033 to ensure proper operation and maintenance of the control device by implementing the following requirements:

(1) Install, calibrate, maintain, and operate according to the manufacturer's specifications a flow indicator that provides a record of vent stream flow from each affected process vent to the control device at least once every hour. The flow indicator sensor shall be installed in the vent stream at the nearest feasible point to the control device inlet but before the point at which the vent streams are combined.

(2) Install, calibrate, maintain, and operate according to the manufacturer's specifications a device to continuously monitor control device operation as specified below:

(i) For a thermal vapor incinerator, a temperature monitoring device equipped with a continuous recorder. The device shall have an accuracy of plus/minus 1 percent of the temperature being monitored in degrees C or plus/minus 0.5 degrees C, whichever is greater. The temperature sensor shall be installed at a location in the combustion chamber downstream of the combustion zone.

(ii) For a catalytic vapor incinerator, a temperature monitoring device equipped with a continuous recorder. The device shall be capable of monitoring temperature at two locations and have an accuracy of plus/minus 1 percent of the temperature being monitored in degrees C or plus/minus 0.5 degrees C, whichever is greater. One temperature sensor shall be installed in the vent stream at the nearest feasible point to the catalyst bed inlet and a second temperature sensor shall be installed in the vent stream at the nearest feasible point to the catalyst bed outlet.

(iii) For a flare, a heat sensing monitoring device equipped with a continuous recorder that indicates the continuous ignition of the pilot flame.

(iv) For a boiler or process heater having a design heat input capacity less than 44 MW, a temperature monitoring device equipped with a continuous recorder. The device shall have an accuracy of plus/minus 1 percent of the temperature being monitored in degrees C or plus/minus 0.5 degrees C, whichever is greater. The temperature sensor shall be installed at a location in the furnace downstream of the combustion zone.

(v) For a boiler or process heater having a design heat input capacity greater than or equal to 44 MW, a monitoring

device equipped with a continuous recorder to measure a parameter(s) that indicates good combustion operating practices are being used.

(vi) For a condenser, either:

(A) A monitoring device equipped with a continuous recorder to measure the concentration level of the organic compounds in the exhaust vent stream from the condenser, or

(B) A temperature monitoring device equipped with a continuous recorder. The device shall be capable of monitoring temperature with an accuracy of plus/minus 1 percent of the temperature being monitored in degrees Celsius (deg. C) or plus/minus 0.5 deg. C, whichever is greater. The temperature sensor shall be installed at a location in the exhaust vent stream from the condenser exit, i.e., product side.

(vii) For a carbon adsorption system that regenerates the carbon bed directly in the control device such as a fixed-bed carbon adsorber, either:

(A) A monitoring device equipped with a continuous recorder to measure the concentration level of the organic compounds in the exhaust vent stream from the carbon bed, or

(B) A monitoring device equipped with a continuous recorder to measure a parameter that indicates the carbon bed is regenerated on a regular, predetermined time cycle.

(3) Inspect the readings from each monitoring device required by Subsections R315-261-1033(f)(1) and (2) at least once each operating day to check control device operation and, if necessary, immediately implement the corrective measures necessary to ensure the control device operates in compliance with the requirements of Section R315-261-1033.

(g) A remanufacturer or other person that stores or treats hazardous secondary material in a hazardous secondary material management unit using a carbon adsorption system such as a fixed-bed carbon adsorber that regenerates the carbon bed directly onsite in the control device shall replace the existing carbon in the control device with fresh carbon at a regular, predetermined time interval that is no longer than the carbon service life established as a requirement of Subsection R315-261-1035(b)(4)(iii)(F).

(h) A remanufacturer or other person that stores or treats hazardous secondary material in a hazardous secondary material management unit using a carbon adsorption system such as a carbon canister that does not regenerate the carbon bed directly onsite in the control device shall replace the existing carbon in the control device with fresh carbon on a regular basis by using one of the following procedures:

(1) Monitor the concentration level of the organic compounds in the exhaust vent stream from the carbon adsorption system on a regular schedule, and replace the existing carbon with fresh carbon immediately when carbon breakthrough is indicated. The monitoring frequency shall be daily or at an interval no greater than 20 percent of the time required to consume the total carbon working capacity established as a requirement of Subsection R315-261-1035(b)(4)(iii)(G), whichever is longer.

(2) Replace the existing carbon with fresh carbon at a regular, predetermined time interval that is less than the design carbon replacement interval established as a requirement of Subsection R315-261-1035(b)(4)(iii)(G).

(i) An alternative operational or process parameter may be monitored if it can be demonstrated that another parameter shall ensure that the control device is operated in conformance with these standards and the control device's design specifications.

(j) A remanufacturer or other person that stores or treats hazardous secondary material at an affected facility seeking to comply with the provisions of Rule R315-261 by using a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system is required to develop documentation including sufficient information to describe the control device

operation and identify the process parameter or parameters that indicate proper operation and maintenance of the control device.

(k) A closed-vent system shall meet either of the following design requirements:

(1) A closed-vent system shall be designed to operate with no detectable emissions, as indicated by an instrument reading of less than 500 ppmv above background as determined by the procedure in Subsection R315-261-1034(b), and by visual inspections; or

(2) A closed-vent system shall be designed to operate at a pressure below atmospheric pressure. The system shall be equipped with at least one pressure gauge or other pressure measurement device that can be read from a readily accessible location to verify that negative pressure is being maintained in the closed-vent system when the control device is operating.

(l) The remanufacturer or other person that stores or treats the hazardous secondary material shall monitor and inspect each closed-vent system required to comply with Section R315-261-1033 to ensure proper operation and maintenance of the closed-vent system by implementing the following requirements:

(1) Each closed-vent system that is used to comply with Subsection R315-261-1033(k)(1) shall be inspected and monitored in accordance with the following requirements:

(i) An initial leak detection monitoring of the closed-vent system shall be conducted by the remanufacturer or other person that stores or treats the hazardous secondary material on or before the date that the system becomes subject to Section R315-261-1033. The remanufacturer or other person that stores or treats the hazardous secondary material shall monitor the closed-vent system components and connections using the procedures specified in Subsection R315-261-1034(b) to demonstrate that the closed-vent system operates with no detectable emissions, as indicated by an instrument reading of less than 500 ppmv above background.

(ii) After initial leak detection monitoring required in Subsection R315-261-1033(l)(1)(i), the remanufacturer or other person that stores or treats the hazardous secondary material shall inspect and monitor the closed-vent system as follows:

(A) Closed-vent system joints, seams, or other connections that are permanently or semi-permanently sealed, e.g., a welded joint between two sections of hard piping or a bolted and gasketed ducting flange, shall be visually inspected at least once per year to check for defects that could result in air pollutant emissions. The remanufacturer or other person that stores or treats the hazardous secondary material shall monitor a component or connection using the procedures specified in Subsection R315-261-1034(b) to demonstrate that it operates with no detectable emissions following any time the component is repaired or replaced, e.g., a section of damaged hard piping is replaced with new hard piping, or the connection is unsealed, e.g., a flange is unbolted.

(B) Closed-vent system components or connections other than those specified in Subsection R315-261-1033(l)(1)(ii)(A) shall be monitored annually and at other times as requested by the Director, except as provided for in Subsection R315-261-1033(o), using the procedures specified in Subsection R315-261-1034(b) to demonstrate that the components or connections operate with no detectable emissions.

(iii) In the event that a defect or leak is detected, the remanufacturer or other person that stores or treats the hazardous secondary material shall repair the defect or leak in accordance with the requirements of Subsection R315-261-1033(l)(3).

(iv) The remanufacturer or other person that stores or treats the hazardous secondary material shall maintain a record of the inspection and monitoring in accordance with the requirements specified in Section R315-261-1035.

(2) Each closed-vent system that is used to comply with Subsection R315-261-1033(k)(2) shall be inspected and

monitored in accordance with the following requirements:

(i) The closed-vent system shall be visually inspected by the remanufacturer or other person that stores or treats the hazardous secondary material to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in ductwork or piping or loose connections.

(ii) The remanufacturer or other person that stores or treats the hazardous secondary material shall perform an initial inspection of the closed-vent system on or before the date that the system becomes subject to Section R315-261-1033. Thereafter, the remanufacturer or other person that stores or treats the hazardous secondary material shall perform the inspections at least once every year.

(iii) In the event that a defect or leak is detected, the remanufacturer or other person that stores or treats the hazardous secondary material shall repair the defect in accordance with the requirements of Subsection R315-261-1033(l)(3).

(iv) The remanufacturer or other person that stores or treats the hazardous secondary material shall maintain a record of the inspection and monitoring in accordance with the requirements specified in Section R315-261-1035.

(3) The remanufacturer or other person that stores or treats the hazardous secondary material shall repair all detected defects as follows:

(i) Detectable emissions, as indicated by visual inspection, or by an instrument reading greater than 500 ppmv above background, shall be controlled as soon as practicable, but not later than 15 calendar days after the emission is detected, except as provided for in Subsection R315-261-1033(l)(3)(iii).

(ii) A first attempt at repair shall be made no later than 5 calendar days after the emission is detected.

(iii) Delay of repair of a closed-vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown, or if the remanufacturer or other person that stores or treats the hazardous secondary material determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be completed by the end of the next process unit shutdown.

(iv) The remanufacturer or other person that stores or treats the hazardous secondary material shall maintain a record of the defect repair in accordance with the requirements specified in Section R315-261-1035.

(m) Closed-vent systems and control devices used to comply with provisions of Sections R315-261-1030 through 1035 shall be operated at all times when emissions may be vented to them.

(n) The owner or operator using a carbon adsorption system to control air pollutant emissions shall document that all carbon that is a hazardous waste and that is removed from the control device is managed in one of the following manners, regardless of the average volatile organic concentration of the carbon:

(1) Regenerated or reactivated in a thermal treatment unit that meets one of the following:

(i) The owner or operator of the unit has been issued a final permit under Rule R315-270 which implements the requirements of Sections R315-264-600 through 603; or

(ii) The unit is equipped with and operating air emission controls in accordance with the applicable requirements of Sections R315-261-1030 through 1035 and 1080 through 1089 or subparts AA and CC of 40 CFR 265 which is incorporated in R315-265; or

(iii) The unit is equipped with and operating air emission controls in accordance with a national emission standard for hazardous air pollutants under 40 CFR part 61 or 40 CFR part

63.

(2) Incinerated in a hazardous waste incinerator for which the owner or operator either:

(i) Has been issued a final permit under Rule R315-270 which implements the requirements of Sections R315-264-340 through 351; or

(ii) Has designed and operates the incinerator in accordance with the interim status requirements of 40 CFR part 265, subpart O, which is incorporated by Rule R315-265.

(3) Burned in a boiler or industrial furnace for which the owner or operator either:

(i) Has been issued a final permit under Rule R315-270 which implements the requirements of Sections R315-266-100 through 112; or

(ii) Has designed and operates the boiler or industrial furnace in accordance with the interim status requirements of Sections R315-266-100 through 112.

(o) Any components of a closed-vent system that are designated, as described in Subsection R315-261-1035(c)(9), as unsafe to monitor are exempt from the requirements of Subsection R315-261-1033(l)(1)(ii)(B) if:

(1) The remanufacturer or other person that stores or treats the hazardous secondary material in a hazardous secondary material management unit using a closed-vent system determines that the components of the closed-vent system are unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with Subsection R315-261-1033(l)(1)(ii)(B); and

(2) The remanufacturer or other person that stores or treats the hazardous secondary material in a hazardous secondary material management unit using a closed-vent system adheres to a written plan that requires monitoring the closed-vent system components using the procedure specified in Subsection R315-261-1033(l)(1)(ii)(B) as frequently as practicable during safe-to-monitor times.

R315-261-1034. Air Emission Standards for Process Vents - Test Methods and Procedures.

(a) Each remanufacturer or other person that stores or treats the hazardous secondary material subject to the provisions of Sections R315-261-1030 through 1035 shall comply with the test methods and procedural requirements provided in Section R315-261-1034.

(b) When a closed-vent system is tested for compliance with no detectable emissions, as required in Subsection R315-261-1033(l), the test shall comply with the following requirements:

(1) Monitoring shall comply with Reference Method 21 in 40 CFR part 60.

(2) The detection instrument shall meet the performance criteria of Reference Method 21.

(3) The instrument shall be calibrated before use on each day of its use by the procedures specified in Reference Method 21.

(4) Calibration gases shall be:

(i) Zero air, less than 10 ppm of hydrocarbon in air.

(ii) A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.

(5) The background level shall be determined as set forth in Reference Method 21.

(6) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21.

(7) The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

(c) Performance tests to determine compliance with Subsection R315-261-1032(a) and with the total organic

compound concentration limit of Subsection R315-261-1033(c) shall comply with the following:

(1) Performance tests to determine total organic compound concentrations and mass flow rates entering and exiting control devices shall be conducted and data reduced in accordance with the following reference methods and calculation procedures:

(i) Method 2 in 40 CFR part 60 for velocity and volumetric flow rate.

(ii) Method 18 or Method 25A in 40 CFR part 60, appendix A, for organic content. If Method 25A is used, the organic HAP used as the calibration gas shall be the single organic HAP representing the largest percent by volume of the emissions. The use of Method 25A is acceptable if the response from the high-level calibration gas is at least 20 times the standard deviation of the response from the zero calibration gas when the instrument is zeroed on the most sensitive scale.

(iii) Each performance test shall consist of three separate runs; each run conducted for at least 1 hour under the conditions that exist when the hazardous secondary material management unit is operating at the highest load or capacity level reasonably expected to occur. For the purpose of determining total organic compound concentrations and mass flow rates, the average of results of all runs shall apply. The average shall be computed on a time-weighted basis.

(iv) Total organic mass flow rates shall be determined by the following equation:

(A) For sources utilizing Method 18.

The equation found in 40 CFR 261.1034(c)(1)(iv)(A), 2015 ed. is adopted and incorporated by reference

Where:

E_h = Total organic mass flow rate, kg/h;

Q_{2sd} = Volumetric flow rate of gases entering or exiting control device, as determined by Method 2, dscm/h;

n = Number of organic compounds in the vent gas;

C_i = Organic concentration in ppm, dry basis, of compound i in the vent gas, as determined by Method 18;

MW_i = Molecular weight of organic compound i in the vent gas, kg/kg-mol;

0.0416 = Conversion factor for molar volume, kg-mol/m³ (at 293 K and 760 mm Hg);

10^{-6} = Conversion from ppm

(B) For sources utilizing Method 25A.

$E_h = (Q)(C)(MW)(0.0416)(10^{-6})$

Where:

E_h = Total organic mass flow rate, kg/h;

Q = Volumetric flow rate of gases entering or exiting control device, as determined by Method 2, dscm/h;

C = Organic concentration in ppm, dry basis, as determined by Method 25A;

MW = Molecular weight of propane, 44;

0.0416 = Conversion factor for molar volume, kg-mol/m³ (at 293 K and 760 mm Hg);

10^{-6} = Conversion from ppm.

(v) The annual total organic emission rate shall be determined by the following equation:

$E_A = (E_h)(H)$

Where:

E_A = Total organic mass emission rate, kg/y;

E_h = Total organic mass flow rate for the process vent, kg/h;

H = Total annual hours of operations for the affected unit,

h.

(vi) Total organic emissions from all affected process vents at the facility shall be determined by summing the hourly total organic mass emission rates, E_h , as determined in Subsection R315-261-1034(c)(1)(iv), and by summing the annual total organic mass emission rates, E_A , as determined in Subsection R315-261-1034(c)(1)(v), for all affected process vents at the facility.

(2) The remanufacturer or other person that stores or treats

the hazardous secondary material shall record such process information as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test.

(3) The remanufacturer or other person that stores or treats the hazardous secondary material at an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

(i) Sampling ports adequate for the test methods specified in Subsection R315-261-1034(c)(1).

(ii) Safe sampling platform(s).

(iii) Safe access to sampling platform(s).

(iv) Utilities for sampling and testing equipment.

(4) For the purpose of making compliance determinations, the time-weighted average of the results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs shall be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the remanufacturer's or other person's that stores or treats the hazardous secondary material control, compliance may, upon the Director's approval, be determined using the average of the results of the two other runs.

(d) To show that a process vent associated with a hazardous secondary material distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operation is not subject to the requirements of Sections R315-261-1030 through 1035, the remanufacturer or other person that stores or treats the hazardous secondary material shall make an initial determination that the time-weighted, annual average total organic concentration of the material managed by the hazardous secondary material management unit is less than 10 ppmw using one of the following two methods:

(1) Direct measurement of the organic concentration of the material using the following procedures:

(i) The remanufacturer or other person that stores or treats the hazardous secondary material shall take a minimum of four grab samples of material for each material stream managed in the affected unit under process conditions expected to cause the maximum material organic concentration.

(ii) For material generated onsite, the grab samples shall be collected at a point before the material is exposed to the atmosphere such as in an enclosed pipe or other closed system that is used to transfer the material after generation to the first affected distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operation. For material generated offsite, the grab samples shall be collected at the inlet to the first material management unit that receives the material provided the material has been transferred to the facility in a closed system such as a tank truck and the material is not diluted or mixed with other material.

(iii) Each sample shall be analyzed and the total organic concentration of the sample shall be computed using Method 9060A, incorporated by reference under Section R315-260-11, of "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, or analyzed for its individual organic constituents.

(iv) The arithmetic mean of the results of the analyses of the four samples shall apply for each material stream managed in the unit in determining the time-weighted, annual average total organic concentration of the material. The time-weighted average is to be calculated using the annual quantity of each material stream processed and the mean organic concentration of each material stream managed in the unit.

(2) Using knowledge of the material to determine that its total organic concentration is less than 10 ppmw. Documentation of the material determination is required.

Examples of documentation that shall be used to support a determination under this provision include production process information documenting that no organic compounds are used, information that the material is generated by a process that is identical to a process at the same or another facility that has previously been demonstrated by direct measurement to generate a material stream having a total organic content less than 10 ppmw, or prior speciation analysis results on the same material stream where it can also be documented that no process changes have occurred since that analysis that could affect the material total organic concentration.

(e) The determination that distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations manage hazardous secondary materials with time-weighted, annual average total organic concentrations less than 10 ppmw shall be made as follows:

(1) By the effective date that the facility becomes subject to the provisions of Sections R315-261-1030 through 1035 or by the date when the material is first managed in a hazardous secondary material management unit, whichever is later, and

(2) For continuously generated material, annually, or

(3) Whenever there is a change in the material being managed or a change in the process that generates or treats the material.

(f) When a remanufacturer or other person that stores or treats the hazardous secondary material and the Director do not agree on whether a distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operation manages a hazardous secondary material with organic concentrations of at least 10 ppmw based on knowledge of the material, the dispute may be resolved by using direct measurement as specified at Subsection R315-261-1034(d)(1).

R315-261-1035. Air Emission Standards for Process Vents - Recordkeeping Requirements.

(a)(1) Each remanufacturer or other person that stores or treats the hazardous secondary material subject to the provisions of Sections R315-261-1030 through 1035 shall comply with the recordkeeping requirements of Section R315-261-1035.

(2) A remanufacturer or other person that stores or treats the hazardous secondary material of more than one hazardous secondary material management unit subject to the provisions of Sections R315-261-1030 through 1035 may comply with the recordkeeping requirements for these hazardous secondary material management units in one recordkeeping system if the system identifies each record by each hazardous secondary material management unit.

(b) The remanufacturer or other person that stores or treats the hazardous secondary material shall keep the following records on-site:

(1) For facilities that comply with the provisions of Subsection R315-261-1033(a)(2), an implementation schedule that includes dates by which the closed-vent system and control device shall be installed and in operation. The schedule shall also include a rationale of why the installation cannot be completed at an earlier date. The implementation schedule shall be kept on-site at the facility by the effective date that the facility becomes subject to the provisions of Sections R315-261-1030 through 1035.

(2) Up-to-date documentation of compliance with the process vent standards in Subsection R315-261-1032, including:

(i) Information and data identifying all affected process vents, annual throughput and operating hours of each affected unit, estimated emission rates for each affected vent and for the overall facility, i.e., the total emissions for all affected vents at the facility, and the approximate location within the facility of each affected unit, e.g., identify the hazardous secondary material management units on a facility plot plan.

(ii) Information and data supporting determinations of vent emissions and emission reductions achieved by add-on control devices based on engineering calculations or source tests. For the purpose of determining compliance, determinations of vent emissions and emission reductions shall be made using operating parameter values, e.g., temperatures, flow rates, or vent stream organic compounds and concentrations, that represent the conditions that result in maximum organic emissions, such as when the hazardous secondary material management unit is operating at the highest load or capacity level reasonably expected to occur. If the remanufacturer or other person that stores or treats the hazardous secondary material takes any action, e.g., managing a material of different composition or increasing operating hours of affected hazardous secondary material management units, that would result in an increase in total organic emissions from affected process vents at the facility, then a new determination is required.

(3) Where a remanufacturer or other person that stores or treats the hazardous secondary material chooses to use test data to determine the organic removal efficiency or total organic compound concentration achieved by the control device, a performance test plan shall be developed and include:

(i) A description of how it is determined that the planned test is going to be conducted when the hazardous secondary material management unit is operating at the highest load or capacity level reasonably expected to occur. This shall include the estimated or design flow rate and organic content of each vent stream and define the acceptable operating ranges of key process and control device parameters during the test program.

(ii) A detailed engineering description of the closed-vent system and control device including:

(A) Manufacturer's name and model number of control device.

(B) Type of control device.

(C) Dimensions of the control device.

(D) Capacity.

(E) Construction materials.

(iii) A detailed description of sampling and monitoring procedures, including sampling and monitoring locations in the system, the equipment to be used, sampling and monitoring frequency, and planned analytical procedures for sample analysis.

(4) Documentation of compliance with Subsection R315-261-1033 shall include the following information:

(i) A list of all information references and sources used in preparing the documentation.

(ii) Records, including the dates, of each compliance test required by Subsection R315-261-1033(k).

(iii) If engineering calculations are used, a design analysis, specifications, drawings, schematics, and piping and instrumentation diagrams based on the appropriate sections of "APTI Course 415: Control of Gaseous Emissions," incorporated by reference as specified in R315-260-11, or other engineering texts acceptable to the Director that present basic control device design information. Documentation provided by the control device manufacturer or vendor that describes the control device design in accordance with Subsections R315-261-1035(b)(4)(iii)(A) through (G) may be used to comply with this requirement. The design analysis shall address the vent stream characteristics and control device operation parameters as specified below.

(A) For a thermal vapor incinerator, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also establish the design minimum and average temperature in the combustion zone and the combustion zone residence time.

(B) For a catalytic vapor incinerator, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also

establish the design minimum and average temperatures across the catalyst bed inlet and outlet.

(C) For a boiler or process heater, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also establish the design minimum and average flame zone temperatures, combustion zone residence time, and description of method and location where the vent stream is introduced into the combustion zone.

(D) For a flare, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also consider the requirements specified in Subsection R315-261-1033(d).

(E) For a condenser, the design analysis shall consider the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature. The design analysis shall also establish the design outlet organic compound concentration level, design average temperature of the condenser exhaust vent stream, and design average temperatures of the coolant fluid at the condenser inlet and outlet.

(F) For a carbon adsorption system such as a fixed-bed adsorber that regenerates the carbon bed directly onsite in the control device, the design analysis shall consider the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature. The design analysis shall also establish the design exhaust vent stream organic compound concentration level, number and capacity of carbon beds, type and working capacity of activated carbon used for carbon beds, design total steam flow over the period of each complete carbon bed regeneration cycle, duration of the carbon bed steaming and cooling/drying cycles, design carbon bed temperature after regeneration, design carbon bed regeneration time, and design service life of carbon.

(G) For a carbon adsorption system such as a carbon canister that does not regenerate the carbon bed directly onsite in the control device, the design analysis shall consider the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature. The design analysis shall also establish the design outlet organic concentration level, capacity of carbon bed, type and working capacity of activated carbon used for carbon bed, and design carbon replacement interval based on the total carbon working capacity of the control device and source operating schedule.

(iv) A statement signed and dated by the remanufacturer or other person that stores or treats the hazardous secondary material certifying that the operating parameters used in the design analysis reasonably represent the conditions that exist when the hazardous secondary material management unit is or would be operating at the highest load or capacity level reasonably expected to occur.

(v) A statement signed and dated by the remanufacturer or other person that stores or treats the hazardous secondary material certifying that the control device is designed to operate at an efficiency of 95 percent or greater unless the total organic concentration limit of Subsection R315-261-1032(a) is achieved at an efficiency less than 95 weight percent or the total organic emission limits of Subsection R315-261-1032(a) for affected process vents at the facility can be attained by a control device involving vapor recovery at an efficiency less than 95 weight percent. A statement provided by the control device manufacturer or vendor certifying that the control equipment meets the design specifications may be used to comply with this requirement.

(vi) If performance tests are used to demonstrate compliance, all test results.

(c) Design documentation and monitoring, operating, and inspection information for each closed-vent system and control device required to comply with the provisions of Rule R315-261 shall be recorded and kept up-to-date at the facility. The

information shall include:

(1) Description and date of each modification that is made to the closed-vent system or control device design.

(2) Identification of operating parameter, description of monitoring device, and diagram of monitoring sensor location or locations used to comply with Subsections R315-261-1033(f)(1) and (2).

(3) Monitoring, operating, and inspection information required by Subsections R315-261-1033(f) through (k).

(4) Date, time, and duration of each period that occurs while the control device is operating when any monitored parameter exceeds the value established in the control device design analysis as specified below:

(i) For a thermal vapor incinerator designed to operate with a minimum residence time of 0.50 second at a minimum temperature of 760 deg. C, period when the combustion temperature is below 760 deg. C.

(ii) For a thermal vapor incinerator designed to operate with an organic emission reduction efficiency of 95 weight percent or greater, period when the combustion zone temperature is more than 28 degrees C below the design average combustion zone temperature established as a requirement of Subsection R315-261-1035(b)(4)(iii)(A).

(iii) For a catalytic vapor incinerator, period when:

(A) Temperature of the vent stream at the catalyst bed inlet is more than 28 degrees C below the average temperature of the inlet vent stream established as a requirement of Subsection R315-261-1035(b)(4)(iii)(B), or

(B) Temperature difference across the catalyst bed is less than 80 percent of the design average temperature difference established as a requirement of Subsection R315-261-1035(b)(4)(iii)(B).

(iv) For a boiler or process heater, period when:

(A) Flame zone temperature is more than 28 degrees C below the design average flame zone temperature established as a requirement of Subsection R315-261-1035(b)(4)(iii)(C), or

(B) Position changes where the vent stream is introduced to the combustion zone from the location established as a requirement of Subsection R315-261-1035(b)(4)(iii)(C).

(v) For a flare, period when the pilot flame is not ignited.

(vi) For a condenser that complies with Subsection R315-261-1033(f)(2)(vi)(A), period when the organic compound concentration level or readings of organic compounds in the exhaust vent stream from the condenser are more than 20 percent greater than the design outlet organic compound concentration level established as a requirement of Subsection R315-261-1035(b)(4)(iii)(E).

(vii) For a condenser that complies with Subsection R315-261-1033(f)(2)(vi)(B), period when:

(A) Temperature of the exhaust vent stream from the condenser is more than 6 degrees C above the design average exhaust vent stream temperature established as a requirement of Subsection R315-261-1035(b)(4)(iii)(E); or

(B) Temperature of the coolant fluid exiting the condenser is more than 6 degrees C above the design average coolant fluid temperature at the condenser outlet established as a requirement of Subsection R315-261-1035(b)(4)(iii)(E).

(viii) For a carbon adsorption system such as a fixed-bed carbon adsorber that regenerates the carbon bed directly on-site in the control device and complies with Subsection R315-261-1033(f)(2)(vii)(A), period when the organic compound concentration level or readings of organic compounds in the exhaust vent stream from the carbon bed are more than 20 percent greater than the design exhaust vent stream organic compound concentration level established as a requirement of Subsection R315-261-1035(b)(4)(iii)(F).

(ix) For a carbon adsorption system such as a fixed-bed carbon adsorber that regenerates the carbon bed directly on-site in the control device and complies with Subsection R315-261-

1033(f)(2)(vii)(B), period when the vent stream continues to flow through the control device beyond the predetermined carbon bed regeneration time established as a requirement of Subsection R315-261-1035(b)(4)(iii)(F).

(5) Explanation for each period recorded under Subsection R315-261-1035(c)(4) of the cause for control device operating parameter exceeding the design value and the measures implemented to correct the control device operation.

(6) For a carbon adsorption system operated subject to requirements specified in Subsections R315-261-1033(g) or (h)(2), date when existing carbon in the control device is replaced with fresh carbon.

(7) For a carbon adsorption system operated subject to requirements specified in Subsection R315-261-1033(h)(1), a log that records:

(i) Date and time when control device is monitored for carbon breakthrough and the monitoring device reading.

(ii) Date when existing carbon in the control device is replaced with fresh carbon.

(8) Date of each control device startup and shutdown.

(9) A remanufacturer or other person that stores or treats the hazardous secondary material designating any components of a closed-vent system as unsafe to monitor pursuant to Subsection R315-261-1033(o) shall record in a log that is kept at the facility the identification of closed-vent system components that are designated as unsafe to monitor in accordance with the requirements of Subsection R315-261-1033(o), an explanation for each closed-vent system component stating why the closed-vent system component is unsafe to monitor, and the plan for monitoring each closed-vent system component.

(10) When each leak is detected as specified in Subsection R315-261-1033(l), the following information shall be recorded:

(i) The instrument identification number, the closed-vent system component identification number, and the operator name, initials, or identification number.

(ii) The date the leak was detected and the date of first attempt to repair the leak.

(iii) The date of successful repair of the leak.

(iv) Maximum instrument reading measured by Method 21 of 40 CFR part 60, appendix A after it is successfully repaired or determined to be nonreparable.

(v) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.

(A) The remanufacturer or other person that stores or treats the hazardous secondary material may develop a written procedure that identifies the conditions that justify a delay of repair. In such cases, reasons for delay of repair may be documented by citing the relevant sections of the written procedure.

(B) If delay of repair was caused by depletion of stocked parts, there shall be documentation that the spare parts were sufficiently stocked on-site before depletion and the reason for depletion.

(d) Records of the monitoring, operating, and inspection information required by Subsections R315-261-1035(c)(3) through (10) shall be maintained by the owner or operator for at least 3 years following the date of each occurrence, measurement, maintenance, corrective action, or record.

(e) For a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system, the Director shall specify the appropriate recordkeeping requirements.

(f) Up-to-date information and data used to determine whether or not a process vent is subject to the requirements in Subsection R315-261-1032 including supporting documentation as required by Subsection R315-261-1034(d)(2) when application of the knowledge of the nature of the hazardous

secondary material stream or the process by which it was produced is used, shall be recorded in a log that is kept at the facility.

R315-261-1050. Air Emission Standards for Equipment Leaks - Applicability.

(a) The regulations in Sections R315-261-1050 through 1064 apply to equipment that contains hazardous secondary materials excluded under the remanufacturing exclusion at Subsection R315-261-4(a)(27), unless the equipment operations are subject to the requirements of an applicable Clean Air Act regulation codified under 40 CFR part 60, part 61, or part 63.

R315-261-1051. Air Emission Standards for Equipment Leaks - Definitions.

As used in Sections R315-261-1050 through 1064, all terms shall have the meaning given them in Section R315-261-1031, the Resource Conservation and Recovery Act, the Utah Solid and Hazardous Waste Act, and Rules R315-260 through 266.

R315-261-1052. Air Emission Standards: Pumps in Light Liquid Service.

(a)(1) Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in Section R315-261-1063(b), except as provided in Subsections R315-261-1052(d), (e), and (f).

(2) Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.

(b)(1) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(2) If there are indications of liquids dripping from the pump seal, a leak is detected.

(c)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Section R315-261-1059.

(2) A first attempt at repair, e.g., tightening the packing gland, shall be made no later than five calendar days after each leak is detected.

(d) Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of Subsection R315-261-1052(a), provided the following requirements are met:

(1) Each dual mechanical seal system shall be:

(i) Operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure, or

(ii) Equipped with a barrier fluid degassing reservoir that is connected by a closed-vent system to a control device that complies with the requirements of Section R315-261-1060, or

(iii) Equipped with a system that purges the barrier fluid into a hazardous secondary material stream with no detectable emissions to the atmosphere.

(2) The barrier fluid system shall not be a hazardous secondary material with organic concentrations 10 percent or greater by weight.

(3) Each barrier fluid system shall be equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.

(4) Each pump shall be checked by visual inspection, each calendar week, for indications of liquids dripping from the pump seals.

(5)(i) Each sensor as described in Subsection R315-261-1052(d)(3) shall be checked daily or be equipped with an audible alarm that shall be checked monthly to ensure that it is functioning properly.

(ii) The remanufacturer or other person that stores or treats the hazardous secondary material shall determine, based on design considerations and operating experience, a criterion that

indicates failure of the seal system, the barrier fluid system, or both.

(6)(i) If there are indications of liquids dripping from the pump seal or the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined in Subsection R315-261-1052(d)(5)(ii), a leak is detected.

(ii) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Section R315-261-1059.

(iii) A first attempt at repair, e.g., relapping the seal, shall be made no later than five calendar days after each leak is detected.

(e) Any pump that is designated, as described in Section R315-261-1064(g)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of Subsections R315-261-1052(a), (c), and (d) if the pump meets the following requirements:

(1) Shall have no externally actuated shaft penetrating the pump housing.

(2) Shall operate with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background as measured by the methods specified in Section R315-261-1063(c).

(3) Shall be tested for compliance with Subsection R315-261-1052(e)(2) initially upon designation, annually, and at other times as requested by the Director.

(f) If any pump is equipped with a closed-vent system capable of capturing and transporting any leakage from the seal or seals to a control device that complies with the requirements of Section R315-261-1060, it is exempt from the requirements of Subsections R315-261-1052(a) through (e).

R315-261-1053. Air Emission Standards: Compressors.

(a) Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of total organic emissions to the atmosphere, except as provided in Subsections R315-261-1053(h) and (i).

(b) Each compressor seal system as required in Subsection R315-261-1053(a) shall be:

(1) Operated with the barrier fluid at a pressure that is at all times greater than the compressor stuffing box pressure, or

(2) Equipped with a barrier fluid system that is connected by a closed-vent system to a control device that complies with the requirements of Section R315-261-1060, or

(3) Equipped with a system that purges the barrier fluid into a hazardous secondary material stream with no detectable emissions to atmosphere.

(c) The barrier fluid shall not be a hazardous secondary material with organic concentrations 10 percent or greater by weight.

(d) Each barrier fluid system as described in Subsections R315-261-1053(a) through (c) shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.

(e)(1) Each sensor as required in Subsection R315-261-1053(d) shall be checked daily or shall be equipped with an audible alarm that shall be checked monthly to ensure that it is functioning properly unless the compressor is located within the boundary of an unmanned plant site, in which case the sensor shall be checked daily.

(2) The remanufacturer or other person that stores or treats the hazardous secondary material shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

(f) If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined under Subsection R315-261-1053(e)(2), a leak is detected.

(g)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Section R315-261-1059.

(2) A first attempt at repair, e.g., tightening the packing gland, shall be made no later than 5 calendar days after each leak is detected.

(h) A compressor is exempt from the requirements of Subsections R315-261-1053(a) and (b) if it is equipped with a closed-vent system capable of capturing and transporting any leakage from the seal to a control device that complies with the requirements of Section R315-261-1060, except as provided in Subsection R315-261-1053(i).

(i) Any compressor that is designated, as described in Section R315-261-1064(g)(2), for no detectable emissions as indicated by an instrument reading of less than 500 ppm above background is exempt from the requirements of Subsections R315-261-1053(a) through (h) if the compressor:

(1) Is determined to be operating with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in Section R315-261-1063(c).

(2) Is tested for compliance with Subsection R315-261-1053(i)(1) initially upon designation, annually, and at other times as requested by the Director.

R315-261-1054. Air Emission Standards: Pressure Relief Devices in Gas/Vapor Service.

(a) Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in Subsection R315-261-1063(c).

(b)(1) After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in Section R315-261-1059.

(2) No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in Subsection R315-261-1063(c).

(c) Any pressure relief device that is equipped with a closed-vent system capable of capturing and transporting leakage from the pressure relief device to a control device as described in Section R315-261-1060 is exempt from the requirements of Subsection R315-261-1054(a) and (b).

R315-261-1055. Air Emission Standards: Sampling Connection Systems.

(a) Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system. This system shall collect the sample purge for return to the process or for routing to the appropriate treatment system. Gases displaced during filling of the sample container are not required to be collected or captured.

(b) Each closed-purge, closed-loop, or closed-vent system as required in Subsection R315-261-1055(a) shall meet one of the following requirements:

(1) Return the purged process fluid directly to the process line;

(2) Collect and recycle the purged process fluid; or

(3) Be designed and operated to capture and transport all the purged process fluid to a material management unit that complies with the applicable requirements of Sections R315-261-1084 through 1086 or a control device that complies with the requirements of Section R315-261-1060.

(c) In-situ sampling systems and sampling systems without purges are exempt from the requirements of Subsections R315-261-1055(a) and (b).

R315-261-1056. Air Emission Standards: Open-Ended Valves or Lines.

(a)(1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve.

(2) The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring hazardous secondary material stream flow through the open-ended valve or line.

(b) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the hazardous secondary material stream end is closed before the second valve is closed.

(c) When a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with Subsection R315-261-1056(a) at all other times.

R315-261-1057. Air Emission Standards: Valves in Gas/Vapor Service or in Light Liquid Service.

(a) Each valve in gas/vapor or light liquid service shall be monitored monthly to detect leaks by the methods specified in Subsection R315-261-1063(b) and shall comply with Subsections R315-261-1057(b) through (e), except as provided in Subsections R315-261-1057(f), (g), and (h) and Sections R315-261-1061 and 1062.

(b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(c)(1) Any valve for which a leak is not detected for two successive months may be monitored the first month of every succeeding quarter, beginning with the next quarter, until a leak is detected.

(2) If a leak is detected, the valve shall be monitored monthly until a leak is not detected for two successive months.

(d)(1) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in Section R315-261-1059.

(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(e) First attempts at repair include, but are not limited to, the following best practices where practicable:

(1) Tightening of bonnet bolts.

(2) Replacement of bonnet bolts.

(3) Tightening of packing gland nuts.

(4) Injection of lubricant into lubricated packing.

(f) Any valve that is designated, as described in Subsection R315-261-1064(g)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of Subsection R315-261-1057(a) if the valve:

(1) Has no external actuating mechanism in contact with the hazardous secondary material stream.

(2) Is operated with emissions less than 500 ppm above background as determined by the method specified in Subsection R315-261-1063(c).

(3) Is tested for compliance with Subsection R315-261-1057(f)(2) initially upon designation, annually, and at other times as requested by the Director.

(g) Any valve that is designated, as described in Subsection R315-261-1064(h)(1), as an unsafe-to-monitor valve is exempt from the requirements of Subsection R315-261-1057(a) if:

(1) The remanufacturer or other person that stores or treats the hazardous secondary material determines that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying

with Subsection R315-261-1057(a).

(2) The remanufacturer or other person that stores or treats the hazardous secondary material adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times.

(h) Any valve that is designated, as described in Subsection R315-261-1064(h)(2), as a difficult-to-monitor valve is exempt from the requirements of Subsection R315-261-1057(a) if:

(1) The remanufacturer or other person that stores or treats the hazardous secondary material determines that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface.

(2) The hazardous secondary material management unit within which the valve is located was in operation before the effective date of Rule R315-261.

(3) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year.

R315-261-1058. Air Emission Standards: Pumps and Valves in Heavy Liquid Service, Pressure Relief Devices in Light Liquid or Heavy Liquid Service, and Flanges and Other Connectors.

(a) Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and flanges and other connectors shall be monitored within five days by the method specified in subsection R315-261-1063(b) if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method.

(b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(c)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Section R315-261-1059.

(2) The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(d) First attempts at repair include, but are not limited to, the best practices described under Subsection R315-261-1057(e).

(e) Any connector that is inaccessible or is ceramic or ceramic-lined, e.g., porcelain, glass, or glass-lined, is exempt from the monitoring requirements of Subsection R315-261-1058(a) and from the recordkeeping requirements of Section R315-261-1064.

R315-261-1059. Air Emission Standards: Delay of Repair.

(a) Delay of repair of equipment for which leaks have been detected shall be allowed if the repair is technically infeasible without a hazardous secondary material management unit shutdown. In such a case, repair of this equipment shall occur before the end of the next hazardous secondary material management unit shutdown.

(b) Delay of repair of equipment for which leaks have been detected shall be allowed for equipment that is isolated from the hazardous secondary material management unit and that does not continue to contain or contact hazardous secondary material with organic concentrations at least 10 percent by weight.

(c) Delay of repair for valves shall be allowed if:

(1) The remanufacturer or other person that stores or treats the hazardous secondary material determines that emissions of purged material resulting from immediate repair are greater than the emissions likely to result from delay of repair.

(2) When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with Section R315-261-1060.

(d) Delay of repair for pumps shall be allowed if:

(1) Repair requires the use of a dual mechanical seal system that includes a barrier fluid system.

(2) Repair is completed as soon as practicable, but not later than 6 months after the leak was detected.

(e) Delay of repair beyond a hazardous secondary material management unit shutdown shall be allowed for a valve if valve assembly replacement is necessary during the hazardous secondary material management unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next hazardous secondary material management unit shutdown will not be allowed unless the next hazardous secondary material management unit shutdown occurs sooner than 6 months after the first hazardous secondary material management unit shutdown.

R315-261-1060. Air Emission Standards: Closed-Vent Systems and Control Devices.

(a) The remanufacturer or other person that stores or treats the hazardous secondary material in a hazardous secondary material management units using closed-vent systems and control devices subject to Sections R315-261-1050 through 1064 shall comply with the provisions of Section R315-261-1033.

(b)(1) The remanufacturer or other person that stores or treats the hazardous secondary material at an existing facility who cannot install a closed-vent system and control device to comply with the provisions of Sections R315-261-1050 through 1064 on the effective date that the facility becomes subject to the provisions of Sections R315-261-1050 through 1064 shall prepare an implementation schedule that includes dates by which the closed-vent system and control device shall be installed and in operation. The controls shall be installed as soon as possible, but the implementation schedule may allow up to 30 months after the effective date that the facility becomes subject to Sections R315-261-1050 through 1064 for installation and startup.

(2) Any unit that begins operation after the effective date of rule R315-261 and is subject to the provisions of Sections R315-261-1050 through 1064 when operation begins, shall comply with the rules immediately, i.e., shall have control devices installed and operating on startup of the affected unit; the 30-month implementation schedule does not apply.

(3) The remanufacturer or other person that stores or treats the hazardous secondary material at any facility in existence on the effective date of a statutory or regulatory amendment that renders the facility subject to Sections R315-261-1050 through 1064 shall comply with all requirements of Sections R315-261-1050 through 1064 as soon as practicable but no later than 30 months after the amendment's effective date. When control equipment required by Sections R315-261-1050 through 1064 cannot be installed and begin operation by the effective date of the amendment, the facility owner or operator shall prepare an implementation schedule that includes the following information: Specific calendar dates for award of contracts or issuance of purchase orders for the control equipment, initiation of on-site installation of the control equipment, completion of the control equipment installation, and performance of any testing to demonstrate that the installed equipment meets the applicable standards of Sections R315-261-1050 through 1064. The remanufacturer or other person that stores or treats the hazardous secondary material shall keep a copy of the implementation schedule at the facility.

(4) Remanufacturers or other persons that store or treat the hazardous secondary materials at facilities and units that become newly subject to the requirements of Sections R315-261-1050 through 1064 after the effective date of Rule R315-261, due to an action other than those described in Subsection R315-261-1060(b)(3) shall comply with all applicable requirements immediately, i.e., shall have control devices installed and operating on the date the facility or unit becomes subject to

Sections R315-261-1050 through 1064; the 30-month implementation schedule does not apply.

R315-261-1061. Air Emission Standards for Equipment Leaks - Alternative Standards for Valves in Gas/Vapor Service or in Light Liquid Service: Percentage of Valves Allowed to Leak.

(a) A remanufacturer or other person that stores or treats the hazardous secondary material subject to the requirements of Section R315-261-1057 may elect to have all valves within a hazardous secondary material management unit comply with an alternative standard that allows no greater than 2 percent of the valves to leak.

(b) The following requirements shall be met if a remanufacturer or other person that stores or treats the hazardous secondary material decides to comply with the alternative standard of allowing 2 percent of valves to leak:

(1) A performance test as specified in Subsection R315-261-1061(c) shall be conducted initially upon designation, annually, and at other times requested by the Director.

(2) If a valve leak is detected, it shall be repaired in accordance with Subsections R315-261-1057(d) and (e).

(c) Performance tests shall be conducted in the following manner:

(1) All valves subject to the requirements in Section R315-261-1057 within the hazardous secondary material management unit shall be monitored within 1 week by the methods specified in Subsection R315-261-1063(b).

(2) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(3) The leak percentage shall be determined by dividing the number of valves subject to the requirements in Section R315-261-1057 for which leaks are detected by the total number of valves subject to the requirements in Section R315-261-1057 within the hazardous secondary material management unit.

R315-261-1062. Air Emission Standards for Equipment Leaks - Alternative Standards for Valves in Gas/Vapor Service or in Light Liquid Service: Skip Period Leak Detection and Repair.

(a) A remanufacturer or other person that stores or treats the hazardous secondary material subject to the requirements of Section R315-261-1057 may elect for all valves within a hazardous secondary material management unit to comply with one of the alternative work practices specified in Subsections R315-261-1062(b)(2) and (3).

(b)(1) A remanufacturer or other person that stores or treats the hazardous secondary material shall comply with the requirements for valves, as described in Section R315-261-1057, except as described in Subsections R315-261-1062(b)(2) and (3).

(2) After two consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than two percent, a remanufacturer or other person that stores or treats the hazardous secondary material may begin to skip one of the quarterly leak detection periods, i.e., monitor for leaks once every six months, for the valves subject to the requirements in Section R315-261-1057.

(3) After five consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than two percent, a remanufacturer or other person that stores or treats the hazardous secondary material may begin to skip three of the quarterly leak detection periods, i.e., monitor for leaks once every year, for the valves subject to the requirements in Section R315-261-1057.

(4) If the percentage of valves leaking is greater than two percent, the remanufacturer or other person that stores or treats the hazardous secondary material shall monitor monthly in compliance with the requirements in Section R315-261-1057,

but may again elect to use Section R315-261-1062 after meeting the requirements of Subsection R315-261-1057(c)(1).

R315-261-1063. Air Emission Standards for Equipment Leaks - Test Methods and Procedures.

(a) Each remanufacturer or other person that stores or treats the hazardous secondary material subject to the provisions of Sections R315-261-1050 through 1064 shall comply with the test methods and procedures requirements provided in Section R315-261-1063.

(b) Leak detection monitoring, as required in Sections R315-261-1052 through 1062, shall comply with the following requirements:

(1) Monitoring shall comply with Reference Method 21 in 40 CFR part 60.

(2) The detection instrument shall meet the performance criteria of Reference Method 21.

(3) The instrument shall be calibrated before use on each day of its use by the procedures specified in Reference Method 21.

(4) Calibration gases shall be:

(i) Zero air, less than 10 ppm of hydrocarbon in air.

(ii) A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.

(5) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21.

(c) When equipment is tested for compliance with no detectable emissions, as required in Subsections R315-261-1052(e), 1053(i), and 1057(f) and Sections R315-261-1054, the test shall comply with the following requirements:

(1) The requirements of Subsections R315-261-1063(b)(1) through (4) shall apply.

(2) The background level shall be determined as set forth in Reference Method 21.

(3) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21.

(4) The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

(d) A remanufacturer or other person that stores or treats the hazardous secondary material shall determine, for each piece of equipment, whether the equipment contains or contacts a hazardous secondary material with organic concentration that equals or exceeds 10 percent by weight using the following:

(1) Methods described in ASTM Methods D 2267-88, E 169-87, E 168-88, E 260-85, incorporated by reference under Section R315-260-11;

(2) Method 9060A, incorporated by reference under Section R315-260-11, of "Test Methods for Evaluating Solid Waste," EPA Publication SW-846, for computing total organic concentration of the sample, or analyzed for its individual organic constituents; or

(3) Application of the knowledge of the nature of the hazardous secondary material stream or the process by which it was produced. Documentation of a material determination by knowledge is required. Examples of documentation that shall be used to support a determination under this provision include production process information documenting that no organic compounds are used, information that the material is generated by a process that is identical to a process at the same or another facility that has previously been demonstrated by direct measurement to have a total organic content less than 10 percent, or prior speciation analysis results on the same material stream where it can also be documented that no process changes have occurred since that analysis that could affect the material total organic concentration.

(e) If a remanufacturer or other person that stores or treats the hazardous secondary material determines that a piece of equipment contains or contacts a hazardous secondary material with organic concentrations at least 10 percent by weight, the determination can be revised only after following the procedures in Subsection R315-261-1063(d)(1) or (2).

(f) When a remanufacturer or other person that stores or treats the hazardous secondary material and the Director do not agree on whether a piece of equipment contains or contacts a hazardous secondary material with organic concentrations at least 10 percent by weight, the procedures in Subsection R315-261-1063(d)(1) or (2) can be used to resolve the dispute.

(g) Samples used in determining the percent organic content shall be representative of the highest total organic content hazardous secondary material that is expected to be contained in or contact the equipment.

(h) To determine if pumps or valves are in light liquid service, the vapor pressures of constituents may be obtained from standard reference texts or may be determined by ASTM D-2879-86, incorporated by reference under Section R315-260-11.

(i) Performance tests to determine if a control device achieves 95 weight percent organic emission reduction shall comply with the procedures of Subsections R315-261-1034(c)(1) through (4).

R315-261-1064. Air Emission Standards for Equipment Leaks - Recordkeeping Requirements.

(a)(1) Each remanufacturer or other person that stores or treats the hazardous secondary material subject to the provisions of Sections R315-261-1050 through 1064 shall comply with the recordkeeping requirements of Section R315-261-1064.

(2) A remanufacturer or other person that stores or treats the hazardous secondary material in more than one hazardous secondary material management unit subject to the provisions of Sections R315-261-1050 through 1064 may comply with the recordkeeping requirements for these hazardous secondary material management units in one recordkeeping system if the system identifies each record by each hazardous secondary material management unit.

(b) Remanufacturer's and other person's that store or treat the hazardous secondary material shall record and keep the following information at the facility:

(1) For each piece of equipment to which Sections R315-261-1050 through 1064 applies:

(i) Equipment identification number and hazardous secondary material management unit identification.

(ii) Approximate locations within the facility, e.g., identify the hazardous secondary material management unit on a facility plot plan.

(iii) Type of equipment, e.g., a pump or pipeline valve.

(iv) Percent-by-weight total organics in the hazardous secondary material stream at the equipment.

(v) Hazardous secondary material state at the equipment, e.g., gas/vapor or liquid.

(vi) Method of compliance with the standard, e.g., "monthly leak detection and repair" or "equipped with dual mechanical seals".

(2) For facilities that comply with the provisions of Subsection R315-261-1033(a)(2), an implementation schedule as specified in Subsection R315-261-1033(a)(2).

(3) Where a remanufacturer or other person that stores or treats the hazardous secondary material chooses to use test data to demonstrate the organic removal efficiency or total organic compound concentration achieved by the control device, a performance test plan as specified in Subsection R315-261-1035(b)(3).

(4) Documentation of compliance with Section R315-261-1060, including the detailed design documentation or

performance test results specified in Subsection R315-261-1035(b)(4).

(c) When each leak is detected as specified in Sections R315-261-1052, 1053, 1057, and 1058, the following requirements apply:

(1) A weatherproof and readily visible identification, marked with the equipment identification number, the date evidence of a potential leak was found in accordance with Subsection R315-261-1058(a), and the date the leak was detected, shall be attached to the leaking equipment.

(2) The identification on equipment, except on a valve, may be removed after it has been repaired.

(3) The identification on a valve may be removed after it has been monitored for two successive months as specified in Subsection R315-261-1057(c) and no leak has been detected during those two months.

(d) When each leak is detected as specified in Sections R315-261-1052, 1053, 1057, and 1058, the following information shall be recorded in an inspection log and shall be kept at the facility:

(1) The instrument and operator identification numbers and the equipment identification number.

(2) The date evidence of a potential leak was found in accordance with Subsection R315-261-1058(a).

(3) The date the leak was detected and the dates of each attempt to repair the leak.

(4) Repair methods applied in each attempt to repair the leak.

(5) "Above 10,000" if the maximum instrument reading measured by the methods specified in Subsection R315-261-1063(b) after each repair attempt is equal to or greater than 10,000 ppm.

(6) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.

(7) Documentation supporting the delay of repair of a valve in compliance with Subsection R315-261-1059(c).

(8) The signature of the remanufacturer or other person that stores or treats the hazardous secondary material, or designate, whose decision it was that repair could not be effected without a hazardous secondary material management unit shutdown.

(9) The expected date of successful repair of the leak if a leak is not repaired within 15 calendar days.

(10) The date of successful repair of the leak.

(e) Design documentation and monitoring, operating, and inspection information for each closed-vent system and control device required to comply with the provisions of Section R315-261-1060 shall be recorded and kept up-to-date at the facility as specified in Subsection R315-261-1035(c). Design documentation is specified in Subsections R315-261-1035(c)(1) and (2) and monitoring, operating, and inspection information in Subsections R315-261-1035(c)(3) through (8).

(f) For a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system, the Director shall specify the appropriate recordkeeping requirements.

(g) The following information pertaining to all equipment subject to the requirements in Sections R315-261-1052 through 1060 shall be recorded in a log that is kept at the facility:

(1) A list of identification numbers for equipment, except welded fittings, subject to the requirements of Sections R315-261-1050 through 1064.

(2)(i) A list of identification numbers for equipment that the remanufacturer or other person that stores or treats the hazardous secondary material elects to designate for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, under the provisions of Subsections R315-261-1052(e), 1053(i), and 1057(f).

(ii) The designation of this equipment as subject to the requirements of Subsection R315-261-1052(e), 1053(i), or 1057(f) shall be signed by the remanufacturer or other person that stores or treats the hazardous secondary material.

(3) A list of equipment identification numbers for pressure relief devices required to comply with Subsection R315-261-1054(a).

(4)(i) The dates of each compliance test required in Sections R315-261-1052(e), 1053(i), and 1057(f) and Section R315-261-1054.

(ii) The background level measured during each compliance test.

(iii) The maximum instrument reading measured at the equipment during each compliance test.

(5) A list of identification numbers for equipment in vacuum service.

(6) Identification, either by list or location, area or group, of equipment that contains or contacts hazardous secondary material with an organic concentration of at least 10 percent by weight for less than 300 hours per calendar year.

(h) The following information pertaining to all valves subject to the requirements of Subsections R315-261-1057(g) and (h) shall be recorded in a log that is kept at the facility:

(1) A list of identification numbers for valves that are designated as unsafe to monitor, an explanation for each valve stating why the valve is unsafe to monitor, and the plan for monitoring each valve.

(2) A list of identification numbers for valves that are designated as difficult to monitor, an explanation for each valve stating why the valve is difficult to monitor, and the planned schedule for monitoring each valve.

(i) The following information shall be recorded in a log that is kept at the facility for valves complying with Section R315-261-1062:

(1) A schedule of monitoring.

(2) The percent of valves found leaking during each monitoring period.

(j) The following information shall be recorded in a log that is kept at the facility:

(1) Criteria required in Subsections R315-261-1052(d)(5)(ii) and 1053(e)(2) and an explanation of the design criteria.

(2) Any changes to these criteria and the reasons for the changes.

(k) The following information shall be recorded in a log that is kept at the facility for use in determining exemptions as provided in the applicability section of Sections R315-261-1050 and other Sections of Rule R315-261:

(1) An analysis determining the design capacity of the hazardous secondary material management unit.

(2) A statement listing the hazardous secondary material influent to and effluent from each hazardous secondary material management unit subject to the requirements in Sections R315-261-1052 through 1060 and an analysis determining whether these hazardous secondary materials are heavy liquids.

(3) An up-to-date analysis and the supporting information and data used to determine whether or not equipment is subject to the requirements in Sections R315-261-1052 through 1060. The record shall include supporting documentation as required by Subsection R315-261-1063(d)(3) when application of the knowledge of the nature of the hazardous secondary material stream or the process by which it was produced is used. If the remanufacturer or other person that stores or treats the hazardous secondary material takes any action, e.g., changing the process that produced the material, that could result in an increase in the total organic content of the material contained in or contacted by equipment determined not to be subject to the requirements in Sections R315-261-1052 through 1060, then a new determination is required.

(l) Records of the equipment leak information required by Subsection R315-261-1064(d) and the operating information required by Subsection R315-261-1064(e) need be kept only three years.

(m) The remanufacturer or other person that stores or treats the hazardous secondary material at a facility with equipment that is subject to Sections R315-261-1050 through 1064 and to regulations at 40 CFR part 60, part 61, or part 63 may elect to determine compliance with Sections R315-261-1050 through 1064 either by documentation pursuant to Section R315-261-1064, or by documentation of compliance with the regulations at 40 CFR part 60, part 61, or part 63 pursuant to the relevant provisions of the regulations at 40 part 60, part 61, or part 63. The documentation of compliance under regulations at 40 CFR part 60, part 61, or part 63 shall be kept with or made readily available at the facility.

R315-261-1080. Air Emission Standards for Tanks and Containers - Applicability.

(a) The regulations in Sections R315-261-1080 through 1089 apply to tanks and containers that contain hazardous secondary materials excluded under the remanufacturing exclusion at Subsection R315-261-4(a)(27), unless the tanks and containers are equipped with and operating air emission controls in accordance with the requirements of an applicable Clean Air Act regulations codified under 40 CFR part 60, part 61, or part 63.

R315-261-1081. Air Emission Standards for Tanks and Containers - Definitions.

(a) As used in Sections R315-261-1080 through 1089, all terms not defined herein shall have the meaning given to them in the Resource Conservation and Recovery Act, the Utah Solid and Hazardous Waste Act, and Rules R315-260 through 266.

(1) "Average volatile organic concentration or average VO concentration" means the mass-weighted average volatile organic concentration of a hazardous secondary material as determined in accordance with the requirements of Section R315-261-1084.

(2) "Closure device" means a cap, hatch, lid, plug, seal, valve, or other type of fitting that blocks an opening in a cover such that when the device is secured in the closed position it prevents or reduces air pollutant emissions to the atmosphere. Closure devices include devices that are detachable from the cover; e.g., a sampling port cap; manually operated, e.g., a hinged access lid or hatch; or automatically operated, e.g., a spring-loaded pressure relief valve.

(3) "Continuous seal" means a seal that forms a continuous closure that completely covers the space between the edge of the floating roof and the wall of a tank. A continuous seal may be a vapor-mounted seal, liquid-mounted seal, or metallic shoe seal. A continuous seal may be constructed of fastened segments so as to form a continuous seal.

(4) "Cover" means a device that provides a continuous barrier over the hazardous secondary material managed in a unit to prevent or reduce air pollutant emissions to the atmosphere. A cover may have openings, such as access hatches, sampling ports, gauge wells, that are necessary for operation, inspection, maintenance, and repair of the unit on which the cover is used. A cover may be a separate piece of equipment which can be detached and removed from the unit or a cover may be formed by structural features permanently integrated into the design of the unit.

(5) "Empty hazardous secondary material container" means:

(a) A container from which all hazardous secondary materials have been removed that can be removed using the practices commonly employed to remove materials from that type of container, e.g., pouring, pumping, and aspirating, and no

more than 2.5 centimeters, one inch, of residue remain on the bottom of the container or inner liner;

(b) A container that is less than or equal to 119 gallons in size and no more than 3 percent by weight of the total capacity of the container remains in the container or inner liner; or

(c) A container that is greater than 119 gallons in size and no more than 0.3 percent by weight of the total capacity of the container remains in the container or inner liner.

(6) "Enclosure" means a structure that surrounds a tank or container, captures organic vapors emitted from the tank or container, and vents the captured vapors through a closed-vent system to a control device.

(7) "External floating roof" means a pontoon-type or double-deck type cover that rests on the surface of the material managed in a tank with no fixed roof.

(8) "Fixed roof" means a cover that is mounted on a unit in a stationary position and does not move with fluctuations in the level of the material managed in the unit.

(9) "Floating membrane cover" means a cover consisting of a synthetic flexible membrane material that rests upon and is supported by the hazardous secondary material being managed in a surface impoundment.

(10) "Floating roof" means a cover consisting of a double deck, pontoon single deck, or internal floating cover which rests upon and is supported by the material being contained, and is equipped with a continuous seal.

(11) "Hard-piping" means pipe or tubing that is manufactured and properly installed in accordance with relevant standards and good engineering practices.

(12) "In light material service" means the container is used to manage a material for which both of the following conditions apply: The vapor pressure of one or more of the organic constituents in the material is greater than 0.3 kilopascals (kPa) at 20 degrees C; and the total concentration of the pure organic constituents having a vapor pressure greater than 0.3 kPa at 20 degrees C is equal to or greater than 20 percent by weight.

(13) "Internal floating roof" means a cover that rests or floats on the material surface, but not necessarily in complete contact with it, inside a tank that has a fixed roof.

(14) "Liquid-mounted seal" means a foam or liquid-filled primary seal mounted in contact with the hazardous secondary material between the tank wall and the floating roof continuously around the circumference of the tank.

(15) "Malfunction" means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

(16) "Material determination" means performing all applicable procedures in accordance with the requirements of Section R315-261-1084 to determine whether a hazardous secondary material meets standards specified in Sections R315-261-1080 through 1089. Examples of a material determination include performing the procedures in accordance with the requirements of Section R315-261-1084 to determine the average VO concentration of a hazardous secondary material at the point of material origination; the average VO concentration of a hazardous secondary material at the point of material treatment and comparing the results to the exit concentration limit specified for the process used to treat the hazardous secondary material; the organic reduction efficiency and the organic biodegradation efficiency for a biological process used to treat a hazardous secondary material and comparing the results to the applicable standards; or the maximum volatile organic vapor pressure for a hazardous secondary material in a tank and comparing the results to the applicable standards.

(17) "Maximum organic vapor pressure" means the sum of the individual organic constituent partial pressures exerted by the material contained in a tank, at the maximum vapor

pressure-causing conditions, i.e., temperature, agitation, pH effects of combining materials, etc., reasonably expected to occur in the tank. For the purpose of Sections R315-261-1080 through 1089, maximum organic vapor pressure is determined using the procedures specified in Subsection R315-261-1084(c).

(18) "Metallic shoe seal" means a continuous seal that is constructed of metal sheets which are held vertically against the wall of the tank by springs, weighted levers, or other mechanisms and is connected to the floating roof by braces or other means. A flexible coated fabric, envelope, spans the annular space between the metal sheet and the floating roof.

(19) "No detectable organic emissions" means no escape of organics to the atmosphere as determined using the procedure specified in Subsection R315-261-1084(d).

(20) "Point of material origination" means as follows:

(a) When the remanufacturer or other person that stores or treats the hazardous secondary material is the generator of the hazardous secondary material, the point of material origination means the point where a material produced by a system, process, or material management unit is determined to be a hazardous secondary material excluded under Subsection R315-261-4(a)(27).

Note to paragraph (a) of the definition of "Point of material origination": "In this case, this term is being used in a manner similar to the use of the term "point of generation" in air standards established under authority of the Clean Air Act in 40 CFR parts 60, 61, and 63.

(b) When the remanufacturer or other person that stores or treats the hazardous secondary material is not the generator of the hazardous secondary material, point of material origination means the point where the remanufacturer or other person that stores or treats the hazardous secondary material accepts delivery or takes possession of the hazardous secondary material.

(21) "Safety device" means a closure device such as a pressure relief valve, frangible disc, fusible plug, or any other type of device which functions exclusively to prevent physical damage or permanent deformation to a unit or its air emission control equipment by venting gases or vapors directly to the atmosphere during unsafe conditions resulting from an unplanned, accidental, or emergency event. For the purpose of Sections R315-261-1080 through 1089, a safety device is not used for routine venting of gases or vapors from the vapor headspace underneath a cover such as during filling of the unit or to adjust the pressure in this vapor headspace in response to normal daily diurnal ambient temperature fluctuations. A safety device is designed to remain in a closed position during normal operations and open only when the internal pressure, or another relevant parameter, exceeds the device threshold setting applicable to the air emission control equipment as determined by the remanufacturer or other person that stores or treats the hazardous secondary material based on manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, ignitable, explosive, reactive, or hazardous materials.

(22) "Single-seal system" means a floating roof having one continuous seal. This seal may be vapor-mounted, liquid-mounted, or a metallic shoe seal.

(23) "Vapor-mounted seal" means a continuous seal that is mounted such that there is a vapor space between the hazardous secondary material in the unit and the bottom of the seal.

(24) "Volatile organic concentration" or "VO concentration" means the fraction by weight of the volatile organic compounds contained in a hazardous secondary material expressed in terms of parts per million (ppmw) as determined by direct measurement or by knowledge of the material in accordance with the requirements of Section R315-261-1084.

For the purpose of determining the VO concentration of a hazardous secondary material, organic compounds with a Henry's law constant value of at least 0.1 mole-fraction-in-the-gas-phase/mole-fraction-in-the-liquid-phase (0.1 Y/X), which can also be expressed as 1.8×10^{-6} atmospheres/gram-mole/m³, at 25 deg. Celsius shall be included.

R315-261-1082. Air Emission Standards for Tanks and Containers - Standards: General.

(a) Section R315-261-1082 applies to the management of hazardous secondary material in tanks and containers subject to Sections R315-261-1080 through 1089.

(b) The remanufacturer or other person that stores or treats the hazardous secondary material shall control air pollutant emissions from each hazardous secondary material management unit in accordance with standards specified in Sections R315-261-1084 through 1087, as applicable to the hazardous secondary material management unit, except as provided for in Subsection R315-261-1082(c).

(c) A tank or container is exempt from standards specified in Sections R315-261-1084 through 1087, as applicable, provided that the hazardous secondary material management unit is a tank or container for which all hazardous secondary material entering the unit has an average VO concentration at the point of material origination of less than 500 parts per million by weight (ppmw). The average VO concentration shall be determined using the procedures specified in Subsection R315-261-1083(a). The remanufacturer or other person that stores or treats the hazardous secondary material shall review and update, as necessary, this determination at least once every 12 months following the date of the initial determination for the hazardous secondary material streams entering the unit.

R315-261-1083. Air Emission Standards for Tanks and Containers - Material Determination Procedures.

(a) Material determination procedure to determine average volatile organic (VO) concentration of a hazardous secondary material at the point of material origination.

(1) Determining average VO concentration at the point of material origination. A remanufacturer or other person that stores or treats the hazardous secondary material shall determine the average VO concentration at the point of material origination for each hazardous secondary material placed in a hazardous secondary material management unit exempted under the provisions of Subsection R315-261-1082(c)(1) from using air emission controls in accordance with standards specified in Sections R315-261-1084 through 1087, as applicable to the hazardous secondary material management unit.

(i) An initial determination of the average VO concentration of the material stream shall be made before the first time any portion of the material in the hazardous secondary material stream is placed in a hazardous secondary material management unit exempted under the provisions of Subsection R315-261-1082(c)(1) from using air emission controls, and thereafter an initial determination of the average VO concentration of the material stream shall be made for each averaging period that a hazardous secondary material is managed in the unit; and

(ii) Perform a new material determination whenever changes to the source generating the material stream are reasonably likely to cause the average VO concentration of the hazardous secondary material to increase to a level that is equal to or greater than the applicable VO concentration limits specified in Section R315-261-1082.

(2) Determination of average VO concentration using direct measurement or knowledge. For a material determination that is required by Subsection R315-261-1083(a)(1), the average VO concentration of a hazardous secondary material at the point of material origination shall be determined using either direct

measurement as specified in Subsection R315-261-1083(a)(3) or by knowledge as specified in Subsection R315-261-1083(a)(4).

(3) Direct measurement to determine average VO concentration of a hazardous secondary material at the point of material origination.

(i) Identification. The remanufacturer or other person that stores or treats the hazardous secondary material shall identify and record in a log that is kept at the facility the point of material origination for the hazardous secondary material.

(ii) Sampling. Samples of the hazardous secondary material stream shall be collected at the point of material origination in a manner such that volatilization of organics contained in the material and in the subsequent sample is minimized and an adequately representative sample is collected and maintained for analysis by the selected method.

(A) The averaging period to be used for determining the average VO concentration for the hazardous secondary material stream on a mass-weighted average basis shall be designated and recorded. The averaging period can represent any time interval that the remanufacturer or other person that stores or treats the hazardous secondary material determines is appropriate for the hazardous secondary material stream but shall not exceed 1 year.

(B) A sufficient number of samples, but no less than four samples, shall be collected and analyzed for a hazardous secondary material determination. All of the samples for a given material determination shall be collected within a one-hour period. The average of the four or more sample results constitutes a material determination for the material stream. One or more material determinations may be required to represent the complete range of material compositions and quantities that occur during the entire averaging period due to normal variations in the operating conditions for the source or process generating the hazardous secondary material stream. Examples of such normal variations are seasonal variations in material quantity or fluctuations in ambient temperature.

(C) All samples shall be collected and handled in accordance with written procedures prepared by the remanufacturer or other person that stores or treats the hazardous secondary material and documented in a site sampling plan. This plan shall describe the procedure by which representative samples of the hazardous secondary material stream are collected such that a minimum loss of organics occurs throughout the sample collection and handling process, and by which sample integrity is maintained. A copy of the written sampling plan shall be maintained at the facility. An example of acceptable sample collection and handling procedures for a total volatile organic constituent concentration may be found in Method 25D in 40 CFR part 60, appendix A.

(D) Sufficient information, as specified in the "site sampling plan" required under Subsection R315-261-1083(a)(3)(ii)(C), shall be prepared and recorded to document the material quantity represented by the samples and, as applicable, the operating conditions for the source or process generating the hazardous secondary material represented by the samples.

(iii) Analysis. Each collected sample shall be prepared and analyzed in accordance with Method 25D in 40 CFR part 60, appendix A for the total concentration of volatile organic constituents, or using one or more methods when the individual organic compound concentrations are identified and summed and the summed material concentration accounts for and reflects all organic compounds in the material with Henry's law constant values at least 0.1 mole-fraction-in-the-gas-phase/mole-fraction-in-the-liquid-phase (0.1 Y/X), which can also be expressed as 1.8×10^{-6} atmospheres/gram-mole/m³, at 25 deg. Celsius. At the discretion of the remanufacturer or other person that stores or treats the hazardous secondary material, the test data obtained

may be adjusted by any appropriate method to discount any contribution to the total volatile organic concentration that is a result of including a compound with a Henry's law constant value of less than 0.1 Y/X at 25 deg. Celsius. To adjust these data, the measured concentration of each individual chemical constituent contained in the material is multiplied by the appropriate constituent-specific adjustment factor (f_{m25D}). If the remanufacturer or other person that stores or treats the hazardous secondary material elects to adjust the test data, the adjustment shall be made to all individual chemical constituents with a Henry's law constant value greater than or equal to 0.1 Y/X at 25 degrees Celsius contained in the material. Constituent-specific adjustment factors (f_{m25D}) can be obtained by contacting the Waste and Chemical Processes Group, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711. Other test methods may be used if they meet the requirements in Subsection R315-261-1083(a)(3)(iii)(A) or (B) and provided the requirement to reflect all organic compounds in the material with Henry's law constant values greater than or equal to 0.1 Y/X, which can also be expressed as 1.8×10^{-6} atmospheres/gram-mole/m³, at 25 deg. Celsius, is met.

(A) Any EPA standard method that has been validated in accordance with "Alternative Validation Procedure for EPA Waste and Wastewater Methods," 40 CFR part 63, appendix D.

(B) Any other analysis method that has been validated in accordance with the procedures specified in Section 5.1 or Section 5.3, and the corresponding calculations in Section 6.1 or Section 6.3, of Method 301 in 40 CFR part 63, appendix A. The data are acceptable if they meet the criteria specified in Section 6.1.5 or Section 6.3.3 of Method 301. If correction is required under section 6.3.3 of Method 301, the data are acceptable if the correction factor is within the range 0.7 to 1.30. Other sections of Method 301 are not required.

(iv) Calculations.

(A) The average VO concentration (C) on a mass-weighted basis shall be calculated by using the results for all material determinations conducted in accordance with Subsections R315-261-1083(a)(3)(ii) and (iii) and the following equation:

The equation found in 40 CFR 261.1083(a)(3)(iv)(A), 2015 ed. is adopted and incorporated by reference.

Where:

C = Average VO concentration of the hazardous secondary material at the point of material origination on a mass-weighted basis, ppmw.

i = Individual material determination "i" of the hazardous secondary material.

n = Total number of material determinations of the hazardous secondary material conducted for the averaging period (not to exceed 1 year).

Q_i = Mass quantity of hazardous secondary material stream represented by C_i , kg/hr.

Q_T = Total mass quantity of hazardous secondary material during the averaging period, kg/hr.

C_i = Measured VO concentration of material determination "i" as determined in accordance with the requirements of Subsection R315-261-1083(a)(3)(iii), i.e., the average of the four or more samples specified in Subsection R315-261-1083(a)(3)(ii)(B), ppmw.

(B) For the purpose of determining C_i for individual material samples analyzed in accordance with Subsection R315-261-1083(a)(3)(iii), the remanufacturer or other person that stores or treats the hazardous secondary material shall account for VO concentrations determined to be below the limit of detection of the analytical method by using the following VO concentration:

(I) If Method 25D in 40 CFR part 60, appendix A is used for the analysis, one-half the blank value determined in the method at section 4.4 of Method 25D in 40 CFR part 60, appendix A.

(II) If any other analytical method is used, one-half the sum of the limits of detection established for each organic constituent in the material that has a Henry's law constant values at least 0.1 mole-fraction-in-the-gas-phase/mole-fraction-in-the-liquid-phase (0.1 Y/X), which can also be expressed as 1.8×10^{-6} atmospheres/gram-mole/m³, at 25 degrees Celsius.

(4) Use of knowledge by the remanufacturer or other person that stores or treats the hazardous secondary material to determine average VO concentration of a hazardous secondary material at the point of material origination.

(i) Documentation shall be prepared that presents the information used as the basis for the knowledge by the remanufacturer or other person that stores or treats the hazardous secondary material of the hazardous secondary material stream's average VO concentration. Examples of information that may be used as the basis for knowledge include: Material balances for the source or process generating the hazardous secondary material stream; constituent-specific chemical test data for the hazardous secondary material stream from previous testing that are still applicable to the current material stream; previous test data for other locations managing the same type of material stream; or other knowledge based on information included in shipping papers or material certification notices.

(ii) If test data are used as the basis for knowledge, then the remanufacturer or other person that stores or treats the hazardous secondary material shall document the test method, sampling protocol, and the means by which sampling variability and analytical variability are accounted for in the determination of the average VO concentration. For example, a remanufacturer or other person that stores or treats the hazardous secondary material may use organic concentration test data for the hazardous secondary material stream that are validated in accordance with Method 301 in 40 CFR part 63, appendix A as the basis for knowledge of the material.

(iii) A remanufacturer or other person that stores or treats the hazardous secondary material using chemical constituent-specific concentration test data as the basis for knowledge of the hazardous secondary material may adjust the test data to the corresponding average VO concentration value which would have been obtained had the material samples been analyzed using Method 25D in 40 CFR part 60, appendix A. To adjust these data, the measured concentration for each individual chemical constituent contained in the material is multiplied by the appropriate constituent-specific adjustment factor (f_{m25D}).

(iv) In the event that the Director and the remanufacturer or other person that stores or treats the hazardous secondary material disagree on a determination of the average VO concentration for a hazardous secondary material stream using knowledge, then the results from a determination of average VO concentration using direct measurement as specified in Subsection R315-261-1083(a)(3) shall be used to establish compliance with the applicable requirements of Sections R315-261-1080 through 1089. The Director may perform or request that the remanufacturer or other person that stores or treats the hazardous secondary material perform this determination using direct measurement. The remanufacturer or other person that stores or treats the hazardous secondary material may choose one or more appropriate methods to analyze each collected sample in accordance with the requirements of Subsection R315-261-1083(a)(3)(iii).

(b) Reserved

(c) Procedure to determine the maximum organic vapor pressure of a hazardous secondary material in a tank.

(1) A remanufacturer or other person that stores or treats the hazardous secondary material shall determine the maximum organic vapor pressure for each hazardous secondary material placed in a tank using Tank Level 1 controls in accordance with standards specified in Subsection R315-261-1084(c).

(2) A remanufacturer or other person that stores or treats the hazardous secondary material shall use either direct measurement as specified in Subsection R315-261-1083(c)(3) or knowledge of the waste as specified by Subsection R315-261-1083(c)(4) to determine the maximum organic vapor pressure which is representative of the hazardous secondary material composition stored or treated in the tank.

(3) Direct measurement to determine the maximum organic vapor pressure of a hazardous secondary material.

(i) Sampling. A sufficient number of samples shall be collected to be representative of the hazardous secondary material contained in the tank. All samples shall be collected and handled in accordance with written procedures prepared by the remanufacturer or other person that stores or treats the hazardous secondary material and documented in a site sampling plan. This plan shall describe the procedure by which representative samples of the hazardous secondary material are collected such that a minimum loss of organics occurs throughout the sample collection and handling process and by which sample integrity is maintained. A copy of the written sampling plan shall be maintained at the facility. An example of acceptable sample collection and handling procedures may be found in Method 25D in 40 CFR part 60, appendix A.

(ii) Analysis. Any appropriate one of the following methods may be used to analyze the samples and compute the maximum organic vapor pressure of the hazardous secondary material:

(A) Method 25E in 40 CFR part 60 appendix A;

(B) Methods described in American Petroleum Institute Publication 2517, Third Edition, February 1989, "Evaporative Loss from External Floating-Roof Tanks," incorporated by reference - refer to Section R315-260-11;

(C) Methods obtained from standard reference texts;

(D) ASTM Method 2879-92, incorporated by reference - refer to Section R315-260-11; and

(E) Any other method approved by the Director.

(4) Use of knowledge to determine the maximum organic vapor pressure of the hazardous secondary material. Documentation shall be prepared and recorded that presents the information used as the basis for the knowledge by the remanufacturer or other person that stores or treats the hazardous secondary material that the maximum organic vapor pressure of the hazardous secondary material is less than the maximum vapor pressure limit listed in Subsection R315-261-1085(b)(1)(i) for the applicable tank design capacity category. An example of information that may be used is documentation that the hazardous secondary material is generated by a process for which at other locations it previously has been determined by direct measurement that the hazardous secondary material's waste maximum organic vapor pressure is less than the maximum vapor pressure limit for the appropriate tank design capacity category.

(d) Procedure for determining no detectable organic emissions for the purpose of complying with Sections R315-261-1080 through 1089:

(1) The test shall be conducted in accordance with the procedures specified in Method 21 of 40 CFR part 60, appendix A. Each potential leak interface, i.e., a location where organic vapor leakage could occur, on the cover and associated closure devices shall be checked. Potential leak interfaces that are associated with covers and closure devices include, but are not limited to: The interface of the cover and its foundation mounting; the periphery of any opening on the cover and its associated closure device; and the sealing seat interface on a spring-loaded pressure relief valve.

(2) The test shall be performed when the unit contains a hazardous secondary material having an organic concentration representative of the range of concentrations for the hazardous secondary material expected to be managed in the unit. During

the test, the cover and closure devices shall be secured in the closed position.

(3) The detection instrument shall meet the performance criteria of Method 21 of 40 CFR part 60, appendix A, except the instrument response factor criteria in section 3.1.2(a) of Method 21 shall be for the average composition of the organic constituents in the hazardous secondary material placed in the hazardous secondary management unit, not for each individual organic constituent.

(4) The detection instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21 of 40 CFR part 60, appendix A.

(5) Calibration gases shall be as follows:

(i) Zero air, less than 10 ppmv hydrocarbon in air, and

(ii) A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppmv methane or n-hexane.

(6) The background level shall be determined according to the procedures in Method 21 of 40 CFR part 60, appendix A.

(7) Each potential leak interface shall be checked by traversing the instrument probe around the potential leak interface as close to the interface as possible, as described in Method 21 of 40 CFR part 60, appendix A. In the case when the configuration of the cover or closure device prevents a complete traverse of the interface, all accessible portions of the interface shall be sampled. In the case when the configuration of the closure device prevents any sampling at the interface and the device is equipped with an enclosed extension or horn, e.g., some pressure relief devices, the instrument probe inlet shall be placed at approximately the center of the exhaust area to the atmosphere.

(8) The arithmetic difference between the maximum organic concentration indicated by the instrument and the background level shall be compared with the value of 500 ppmv except when monitoring a seal around a rotating shaft that passes through a cover opening, in which case the comparison shall be as specified in Subsection R315-261-1083(d)(9). If the difference is less than 500 ppmv, then the potential leak interface is determined to operate with no detectable organic emissions.

(9) For the seals around a rotating shaft that passes through a cover opening, the arithmetic difference between the maximum organic concentration indicated by the instrument and the background level shall be compared with the value of 10,000 ppmw. If the difference is less than 10,000 ppmw, then the potential leak interface is determined to operate with no detectable organic emissions.

R315-261-1084. Air Emission Standards for Tanks and Containers - Standards: Tanks.

(a) The provisions of Section R315-261-1084 apply to the control of air pollutant emissions from tanks for which Subsection R315-261-1082(b) references the use of Section R315-261-1084 for such air emission control.

(b) The remanufacturer or other person that stores or treats the hazardous secondary material shall control air pollutant emissions from each tank subject to Section R315-261-1084 in accordance with the following requirements as applicable:

(1) For a tank that manages hazardous secondary material that meets all of the conditions specified in Subsections R315-261-1084(b)(1)(i) through (iii), the remanufacturer or other person that stores or treats the hazardous secondary material shall control air pollutant emissions from the tank in accordance with the Tank Level 1 controls specified in Subsection R315-261-1084(c) or the Tank Level 2 controls specified in Subsection R315-261-1084(d).

(i) The hazardous secondary material in the tank has a maximum organic vapor pressure which is less than the maximum organic vapor pressure limit for the tank's design

capacity category as follows:

(A) For a tank design capacity equal to or greater than 151 m³ but less than 151 m³, the maximum organic vapor pressure limit for the tank is 5.2 kPa.

(B) For a tank design capacity equal to or greater than 75 m³ but less than 151 m³, the maximum organic vapor pressure limit for the tank is 27.6 kPa.

(C) For a tank design capacity less than 75 m³, the maximum organic vapor pressure limit for the tank is 76.6 kPa.

(ii) The hazardous secondary material in the tank is not heated by the remanufacturer or other person that stores or treats the hazardous secondary material to a temperature that is greater than the temperature at which the maximum organic vapor pressure of the hazardous secondary material is determined for the purpose of complying with Subsection R315-261-1084(b)(1)(i).

(2) For a tank that manages hazardous secondary material that does not meet all of the conditions specified in Subsections R315-261-1084(b)(1)(i) through (iii), the remanufacturer or other person that stores or treats the hazardous secondary material shall control air pollutant emissions from the tank by using Tank Level 2 controls in accordance with the requirements of Subsection R315-261-1084(d). An example of tanks required to use Tank Level 2 controls is a tank for which the hazardous secondary material in the tank has a maximum organic vapor pressure that is equal to or greater than the maximum organic vapor pressure limit for the tank's design capacity category as specified in Subsection R315-261-1084(b)(1)(i).

(c) Remanufacturers or other persons that store or treat the hazardous secondary material controlling air pollutant emissions from a tank using Tank Level 1 controls shall meet the requirements specified in Subsection R315-261-1084(c)(1) through (4):

(1) The remanufacturer or other person that stores or treats that hazardous secondary material shall determine the maximum organic vapor pressure for a hazardous secondary material to be managed in the tank using Tank Level 1 controls before the first time the hazardous secondary material is placed in the tank. The maximum organic vapor pressure shall be determined using the procedures specified in Subsection R315-261-1083(c). Thereafter, the remanufacturer or other person that stores or treats the hazardous secondary material shall perform a new determination whenever changes to the hazardous secondary material managed in the tank could potentially cause the maximum organic vapor pressure to increase to a level that is equal to or greater than the maximum organic vapor pressure limit for the tank design capacity category specified in Subsection R315-261-1084(b)(1)(i), as applicable to the tank.

(2) The tank shall be equipped with a fixed roof designed to meet the following specifications:

(i) The fixed roof and its closure devices shall be designed to form a continuous barrier over the entire surface area of the hazardous secondary material in the tank. The fixed roof may be a separate cover installed on the tank, e.g., a removable cover mounted on an open-top tank, or may be an integral part of the tank structural design, e.g., a horizontal cylindrical tank equipped with a hatch.

(ii) The fixed roof shall be installed in a manner such that there are no visible cracks, holes, gaps, or other open spaces between roof section joints or between the interface of the roof edge and the tank wall.

(iii) Each opening in the fixed roof, and any manifold system associated with the fixed roof, shall be either:

(A) Equipped with a closure device designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the opening and the closure device; or

(B) Connected by a closed-vent system that is vented to a

control device. The control device shall remove or destroy organics in the vent stream, and shall be operating whenever hazardous secondary material is managed in the tank, except as provided for in Subsection R315-261-1084(c)(2)(iii)(B)(I) and (II).

(I) During periods when it is necessary to provide access to the tank for performing the activities of Subsection R315-261-1084(c)(2)(iii)(B)(II), venting of the vapor headspace underneath the fixed roof to the control device is not required, opening of closure devices is allowed, and removal of the fixed roof is allowed. Following completion of the activity, the remanufacturer or other person that stores or treats the hazardous secondary material shall promptly secure the closure device in the closed position or reinstall the cover, as applicable, and resume operation of the control device.

(II) During periods of routine inspection, maintenance, or other activities needed for normal operations, and for removal of accumulated sludge or other residues from the bottom of the tank.

(iv) The fixed roof and its closure devices shall be made of suitable materials that will minimize exposure of the hazardous secondary material to the atmosphere, to the extent practical, and will maintain the integrity of the fixed roof and closure devices throughout their intended service life. Factors to be considered when selecting the materials for and designing the fixed roof and closure devices shall include: organic vapor permeability, the effects of any contact with the hazardous secondary material or its vapors managed in the tank; the effects of outdoor exposure to wind, moisture, and sunlight; and the operating practices used for the tank on which the fixed roof is installed.

(3) Whenever a hazardous secondary material is in the tank, the fixed roof shall be installed with each closure device secured in the closed position except as follows:

(i) Opening of closure devices or removal of the fixed roof is allowed at the following times:

(A) To provide access to the tank for performing routine inspection, maintenance, or other activities needed for normal operations. Examples of such activities include those times when a worker needs to open a port to sample the liquid in the tank, or when a worker needs to open a hatch to maintain or repair equipment. Following completion of the activity, the remanufacturer or other person that stores or treats the hazardous secondary material shall promptly secure the closure device in the closed position or reinstall the cover, as applicable, to the tank.

(B) To remove accumulated sludge or other residues from the bottom of tank.

(ii) Opening of a spring-loaded pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device which vents to the atmosphere is allowed during normal operations for the purpose of maintaining the tank internal pressure in accordance with the tank design specifications. The device shall be designed to operate with no detectable organic emissions when the device is secured in the closed position. The settings at which the device opens shall be established such that the device remains in the closed position whenever the tank internal pressure is within the internal pressure operating range determined by the remanufacturer or other person that stores or treats the hazardous secondary material based on the tank manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, ignitable, explosive, reactive, or hazardous materials. Examples of normal operating conditions that may require these devices to open are during those times when the tank internal pressure exceeds the internal pressure operating range for the tank as a result of loading operations or diurnal ambient temperature fluctuations.

(iii) Opening of a safety device, as defined in Section R315-261-1081, is allowed at any time conditions require doing so to avoid an unsafe condition.

(4) The remanufacturer or other person that stores or treats the hazardous secondary material shall inspect the air emission control equipment in accordance with the following requirements.

(i) The fixed roof and its closure devices shall be visually inspected by the remanufacturer or other person that stores or treats the hazardous secondary material to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the roof sections or between the roof and the tank wall; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.

(ii) The remanufacturer or other person that stores or treats the hazardous secondary material shall perform an initial inspection of the fixed roof and its closure devices on or before the date that the tank becomes subject to Section R315-261-1084. Thereafter, the remanufacturer or other person that stores or treats the hazardous secondary material shall perform the inspections at least once every year except under the special conditions provided for in Subsection R315-261-1084(l).

(iii) In the event that a defect is detected, the remanufacturer or other person that stores or treats the hazardous secondary material shall repair the defect in accordance with the requirements of Subsection R315-261-1084(k).

(iv) The remanufacturer or other person that stores or treats the hazardous secondary material shall maintain a record of the inspection in accordance with the requirements specified in Subsection R315-261-1089(b).

(d) Remanufacturers or other persons that store or treat the hazardous secondary material controlling air pollutant emissions from a tank using Tank Level 2 controls shall use one of the following tanks:

(1) A fixed-roof tank equipped with an internal floating roof in accordance with the requirements specified in Subsection R315-261-1084(e);

(2) A tank equipped with an external floating roof in accordance with the requirements specified in Subsection R315-261-1084(f);

(3) A tank vented through a closed-vent system to a control device in accordance with the requirements specified in Subsection R315-261-1084(g);

(4) A pressure tank designed and operated in accordance with the requirements specified in Subsection R315-261-1084(h); or

(5) A tank located inside an enclosure that is vented through a closed-vent system to an enclosed combustion control device in accordance with the requirements specified in Subsection R315-261-1084(i).

(e) The remanufacturer or other person that stores or treats the hazardous secondary material who controls air pollutant emissions from a tank using a fixed roof with an internal floating roof shall meet the requirements specified in Subsections R315-261-1084(e)(1) through (3).

(1) The tank shall be equipped with a fixed roof and an internal floating roof in accordance with the following requirements:

(i) The internal floating roof shall be designed to float on the liquid surface except when the floating roof shall be supported by the leg supports.

(ii) The internal floating roof shall be equipped with a continuous seal between the wall of the tank and the floating roof edge that meets either of the following requirements:

(A) A single continuous seal that is either a liquid-mounted seal or a metallic shoe seal, as defined in Section

R315-261-1081; or

(B) Two continuous seals mounted one above the other. The lower seal may be a vapor-mounted seal.

(iii) The internal floating roof shall meet the following specifications:

(A) Each opening in a noncontact internal floating roof except for automatic bleeder vents, vacuum breaker vents, and the rim space vents is to provide a projection below the liquid surface.

(B) Each opening in the internal floating roof shall be equipped with a gasketed cover or a gasketed lid except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains.

(C) Each penetration of the internal floating roof for the purpose of sampling shall have a slit fabric cover that covers at least 90 percent of the opening.

(D) Each automatic bleeder vent and rim space vent shall be gasketed.

(E) Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

(F) Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

(2) The remanufacturer or other person that stores or treats the hazardous secondary material shall operate the tank in accordance with the following requirements:

(i) When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be completed as soon as practical.

(ii) Automatic bleeder vents are to be set closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the leg supports.

(iii) Prior to filling the tank, each cover, access hatch, gauge float well or lid on any opening in the internal floating roof shall be bolted or fastened closed, i.e., no visible gaps. Rim space vents are to be set to open only when the internal floating roof is not floating or when the pressure beneath the rim exceeds the manufacturer's recommended setting.

(3) The remanufacturer or other person that stores or treats the hazardous secondary material shall inspect the internal floating roof in accordance with the procedures specified as follows:

(i) The floating roof and its closure devices shall be visually inspected by the remanufacturer or other person that stores or treats the hazardous secondary material to check for defects that could result in air pollutant emissions. Defects include, but are not limited to: The internal floating roof is not floating on the surface of the liquid inside the tank; liquid has accumulated on top of the internal floating roof; any portion of the roof seals have detached from the roof rim; holes, tears, or other openings are visible in the seal fabric; the gaskets no longer close off the hazardous secondary material surface from the atmosphere; or the slotted membrane has more than 10 percent open area.

(ii) The remanufacturer or other person that stores or treats the hazardous secondary material shall inspect the internal floating roof components as follows except as provided in Subsection R315-261-1084(e)(3)(iii):

(A) Visually inspect the internal floating roof components through openings on the fixed-roof, e.g., manholes and roof hatches, at least once every 12 months after initial fill, and

(B) Visually inspect the internal floating roof, primary seal, secondary seal, if one is in service, gaskets, slotted membranes, and sleeve seals, if any, every time the tank is emptied and degassed and at least every 10 years.

(iii) As an alternative to performing the inspections specified in Subsection R315-261-1084(e)(3)(ii) for an internal floating roof equipped with two continuous seals mounted one

above the other, the remanufacturer or other person that stores or treats the hazardous secondary material may visually inspect the internal floating roof, primary and secondary seals, gaskets, slotted membranes, and sleeve seals, if any, each time the tank is emptied and degassed and at least every five years.

(iv) Prior to each inspection required by Subsection R315-261-1084(e)(3)(ii) or (iii), the remanufacturer or other person that stores or treats the hazardous secondary material shall notify the Director in advance of each inspection to provide the Director with the opportunity to have an observer present during the inspection. The remanufacturer or other person that stores or treats the hazardous secondary material shall notify the Director of the date and location of the inspection as follows:

(A) Prior to each visual inspection of an internal floating roof in a tank that has been emptied and degassed, written notification shall be prepared and sent by the remanufacturer or other person that stores or treats the hazardous secondary material so that it is received by the Director at least 30 calendar days before refilling the tank except when an inspection is not planned as provided for in Subsection R315-261-1084(e)(3)(iv)(B).

(B) When a visual inspection is not planned and the remanufacturer or other person that stores or treats the hazardous secondary material could not have known about the inspection 30 calendar days before refilling the tank, the remanufacturer or other person that stores or treats the hazardous secondary material shall notify the Director as soon as possible, but no later than seven calendar days before refilling of the tank. This notification may be made by telephone and immediately followed by a written explanation for why the inspection is unplanned. Alternatively, written notification, including the explanation for the unplanned inspection, may be sent so that it is received by the Director at least seven calendar days before refilling the tank.

(v) In the event that a defect is detected, the remanufacturer or other person that stores or treats the hazardous secondary material shall repair the defect in accordance with the requirements of Subsection R315-261-1084(k).

(vi) The remanufacturer or other person that stores or treats the hazardous secondary material shall maintain a record of the inspection in accordance with the requirements specified in Subsection R315-261-1089(b).

(4) Safety devices, as defined in Section R315-261-1081, may be installed and operated as necessary on any tank complying with the requirements of Subsection R315-261-1084(e).

(f) The remanufacturer or other person that stores or treats the hazardous secondary material who controls air pollutant emissions from a tank using an external floating roof shall meet the requirements specified in Subsections R315-261-1084(f)(1) through (3).

(1) The remanufacturer or other person that stores or treats the hazardous secondary material shall design the external floating roof in accordance with the following requirements:

(i) The external floating roof shall be designed to float on the liquid surface except when the floating roof shall be supported by the leg supports.

(ii) The floating roof shall be equipped with two continuous seals, one above the other, between the wall of the tank and the roof edge. The lower seal is referred to as the primary seal, and the upper seal is referred to as the secondary seal.

(A) The primary seal shall be a liquid-mounted seal or a metallic shoe seal, as defined in Section R315-261-1081. The total area of the gaps between the tank wall and the primary seal shall not exceed 212 square centimeters per meter of tank diameter, and the width of any portion of these gaps shall not exceed 3.8 centimeters. If a metallic shoe seal is used for the

primary seal, the metallic shoe seal shall be designed so that one end extends into the liquid in the tank and the other end extends a vertical distance of at least 61 centimeters above the liquid surface.

(B) The secondary seal shall be mounted above the primary seal and cover the annular space between the floating roof and the wall of the tank. The total area of the gaps between the tank wall and the secondary seal shall not exceed 21.2 square centimeters per meter of tank diameter, and the width of any portion of these gaps shall not exceed 1.3 centimeters.

(iii) The external floating roof shall meet the following specifications:

(A) Except for automatic bleeder vents, vacuum breaker vents, and rim space vents, each opening in a noncontact external floating roof shall provide a projection below the liquid surface.

(B) Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof shall be equipped with a gasketed cover, seal, or lid.

(C) Each access hatch and each gauge float well shall be equipped with a cover designed to be bolted or fastened when the cover is secured in the closed position.

(D) Each automatic bleeder vent and each rim space vent shall be equipped with a gasket.

(E) Each roof drain that empties into the liquid managed in the tank shall be equipped with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening.

(F) Each unslotted and slotted guide pole well shall be equipped with a gasketed sliding cover or a flexible fabric sleeve seal.

(G) Each unslotted guide pole shall be equipped with a gasketed cap on the end of the pole.

(H) Each slotted guide pole shall be equipped with a gasketed float or other device which closes off the liquid surface from the atmosphere.

(I) Each gauge hatch and each sample well shall be equipped with a gasketed cover.

(2) The remanufacturer or other person that stores or treats the hazardous secondary material shall operate the tank in accordance with the following requirements:

(i) When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be completed as soon as practical.

(ii) Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof shall be secured and maintained in a closed position at all times except when the closure device shall be open for access.

(iii) Covers on each access hatch and each gauge float well shall be bolted or fastened when secured in the closed position.

(iv) Automatic bleeder vents shall be set closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the leg supports.

(v) Rim space vents shall be set to open only at those times that the roof is being floated off the roof leg supports or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

(vi) The cap on the end of each unslotted guide pole shall be secured in the closed position at all times except when measuring the level or collecting samples of the liquid in the tank.

(vii) The cover on each gauge hatch or sample well shall be secured in the closed position at all times except when the hatch or well shall be opened for access.

(viii) Both the primary seal and the secondary seal shall completely cover the annular space between the external floating roof and the wall of the tank in a continuous fashion except during inspections.

(3) The remanufacturer or other person that stores or treats the hazardous secondary material shall inspect the external

floating roof in accordance with the procedures specified as follows:

(i) The remanufacturer or other person that stores or treats the hazardous secondary material shall measure the external floating roof seal gaps in accordance with the following requirements:

(A) The remanufacturer or other person that stores or treats the hazardous secondary material shall perform measurements of gaps between the tank wall and the primary seal within 60 calendar days after initial operation of the tank following installation of the floating roof and, thereafter, at least once every 5 years.

(B) The remanufacturer or other person that stores or treats the hazardous secondary material shall perform measurements of gaps between the tank wall and the secondary seal within 60 calendar days after initial operation of the tank following installation of the floating roof and, thereafter, at least once every year.

(C) If a tank ceases to hold hazardous secondary material for a period of 1 year or more, subsequent introduction of hazardous secondary material into the tank shall be considered an initial operation for the purposes of Subsections R315-261-1084(f)(3)(i)(A) and (B).

(D) The remanufacturer or other person that stores or treats the hazardous secondary material shall determine the total surface area of gaps in the primary seal and in the secondary seal individually using the following procedure:

(I) The seal gap measurements shall be performed at one or more floating roof levels when the roof is floating off the roof supports.

(II) Seal gaps, if any, shall be measured around the entire perimeter of the floating roof in each place where a 0.32-centimeter diameter uniform probe passes freely, without forcing or binding against the seal, between the seal and the wall of the tank and measure the circumferential distance of each such location.

(III) For a seal gap measured under Subsection R315-261-1084(f)(3), the gap surface area shall be determined by using probes of various widths to measure accurately the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance.

(IV) The total gap area shall be calculated by adding the gap surface areas determined for each identified gap location for the primary seal and the secondary seal individually, and then dividing the sum for each seal type by the nominal diameter of the tank. These total gap areas for the primary seal and secondary seal are then compared to the respective standards for the seal type as specified in Subsection R315-261-1084(f)(1)(ii).

(E) In the event that the seal gap measurements do not conform to the specifications in Subsection R315-261-1084(f)(1)(ii), the remanufacturer or other person that stores or treats the hazardous secondary material shall repair the defect in accordance with the requirements of Subsection R315-261-1084(k).

(F) The remanufacturer or other person that stores or treats the hazardous secondary material shall maintain a record of the inspection in accordance with the requirements specified in Subsection R315-261-1089(b).

(ii) The remanufacturer or other person that stores or treats the hazardous secondary material shall visually inspect the external floating roof in accordance with the following requirements:

(A) The floating roof and its closure devices shall be visually inspected by the remanufacturer or other person that stores or treats the hazardous secondary material to check for defects that could result in air pollutant emissions. Defects include, but are not limited to: Holes, tears, or other openings in the rim seal or seal fabric of the floating roof; a rim seal detached from the floating roof; all or a portion of the floating

roof deck being submerged below the surface of the liquid in the tank; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.

(B) The remanufacturer or other person that stores or treats the hazardous secondary material shall perform an initial inspection of the external floating roof and its closure devices on or before the date that the tank becomes subject to Section R315-261-1084. Thereafter, the remanufacturer or other person that stores or treats the hazardous secondary material shall perform the inspections at least once every year except for the special conditions provided for in Subsection R315-261-1084(l).

(C) In the event that a defect is detected, the remanufacturer or other person that stores or treats the hazardous secondary material shall repair the defect in accordance with the requirements of Subsection R315-261-1084(k).

(D) The remanufacturer or other person that stores or treats the hazardous secondary material shall maintain a record of the inspection in accordance with the requirements specified in Subsection R315-261-1089(b).

(iii) Prior to each inspection required by Subsection R315-261-1084(f)(3)(i) or (ii), the remanufacturer or other person that stores or treats the hazardous secondary material shall notify the Director in advance of each inspection to provide the Director with the opportunity to have an observer present during the inspection. The remanufacturer or other person that stores or treats the hazardous secondary material shall notify the Director of the date and location of the inspection as follows:

(A) Prior to each inspection to measure external floating roof seal gaps as required under Subsection R315-261-1084(f)(3)(i), written notification shall be prepared and sent by the remanufacturer or other person that stores or treats the hazardous secondary material so that it is received by the Director at least 30 calendar days before the date the measurements are scheduled to be performed.

(B) Prior to each visual inspection of an external floating roof in a tank that has been emptied and degassed, written notification shall be prepared and sent by the remanufacturer or other person that stores or treats the hazardous secondary material so that it is received by the Director at least 30 calendar days before refilling the tank except when an inspection is not planned as provided for in Subsection R315-261-1084(f)(3)(iii)(C).

(C) When a visual inspection is not planned and the remanufacturer or other person that stores or treats the hazardous secondary material could not have known about the inspection 30 calendar days before refilling the tank, the owner or operator shall notify the Director as soon as possible, but no later than seven calendar days before refilling of the tank. This notification may be made by telephone and immediately followed by a written explanation for why the inspection is unplanned. Alternatively, written notification, including the explanation for the unplanned inspection, may be sent so that it is received by the Director at least seven calendar days before refilling the tank.

(4) Safety devices, as defined in Section R315-261-1081, may be installed and operated as necessary on any tank complying with the requirements of Subsection R315-261-1084(f).

(g) The remanufacturer or other person that stores or treats the hazardous secondary material who controls air pollutant emissions from a tank by venting the tank to a control device shall meet the requirements specified in Subsections R315-261-1084(g)(1) through (3).

(1) The tank shall be covered by a fixed roof and vented directly through a closed-vent system to a control device in accordance with the following requirements:

(i) The fixed roof and its closure devices shall be designed to form a continuous barrier over the entire surface area of the liquid in the tank.

(ii) Each opening in the fixed roof not vented to the control device shall be equipped with a closure device. If the pressure in the vapor headspace underneath the fixed roof is less than atmospheric pressure when the control device is operating, the closure devices shall be designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the cover opening and the closure device. If the pressure in the vapor headspace underneath the fixed roof is equal to or greater than atmospheric pressure when the control device is operating, the closure device shall be designed to operate with no detectable organic emissions.

(iii) The fixed roof and its closure devices shall be made of suitable materials that will minimize exposure of the hazardous secondary material to the atmosphere, to the extent practical, and will maintain the integrity of the fixed roof and closure devices throughout their intended service life. Factors to be considered when selecting the materials for and designing the fixed roof and closure devices shall include: Organic vapor permeability, the effects of any contact with the liquid and its vapor managed in the tank; the effects of outdoor exposure to wind, moisture, and sunlight; and the operating practices used for the tank on which the fixed roof is installed.

(iv) The closed-vent system and control device shall be designed and operated in accordance with the requirements of Section R315-261-1087.

(2) Whenever a hazardous secondary material is in the tank, the fixed roof shall be installed with each closure device secured in the closed position and the vapor headspace underneath the fixed roof vented to the control device except as follows:

(i) Venting to the control device is not required, and opening of closure devices or removal of the fixed roof is allowed at the following times:

(A) To provide access to the tank for performing routine inspection, maintenance, or other activities needed for normal operations. Examples of such activities include those times when a worker needs to open a port to sample liquid in the tank, or when a worker needs to open a hatch to maintain or repair equipment. Following completion of the activity, the remanufacturer or other person that stores or treats the hazardous secondary material shall promptly secure the closure device in the closed position or reinstall the cover, as applicable, to the tank.

(B) To remove accumulated sludge or other residues from the bottom of a tank.

(ii) Opening of a safety device, as defined in Section R315-261-1081, is allowed at any time conditions require doing so to avoid an unsafe condition.

(3) The remanufacturer or other person that stores or treats the hazardous secondary material shall inspect and monitor the air emission control equipment in accordance with the following procedures:

(i) The fixed roof and its closure devices shall be visually inspected by the remanufacturer or other person that stores or treats the hazardous secondary material to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the roof sections or between the roof and the tank wall; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.

(ii) The closed-vent system and control device shall be inspected and monitored by the remanufacturer or other person that stores or treats the hazardous secondary material in

accordance with the procedures specified in Section R315-261-1087.

(iii) The remanufacturer or other person that stores or treats the hazardous secondary material shall perform an initial inspection of the air emission control equipment on or before the date that the tank becomes subject to Section R315-261-1084. Thereafter, the remanufacturer or other person that stores or treats the hazardous secondary material shall perform the inspections at least once every year except for the special conditions provided for in Subsection R315-261-1084(l).

(iv) In the event that a defect is detected, the remanufacturer or other person that stores or treats the hazardous secondary material shall repair the defect in accordance with the requirements of Subsection R315-261-1084(k).

(v) The remanufacturer or other person that stores or treats the hazardous secondary material shall maintain a record of the inspection in accordance with the requirements specified in Subsection R315-261-1089(b).

(h) The remanufacturer or other person that stores or treats the hazardous secondary material who controls air pollutant emissions by using a pressure tank shall meet the following requirements.

(1) The tank shall be designed not to vent to the atmosphere as a result of compression of the vapor headspace in the tank during filling of the tank to its design capacity.

(2) All tank openings shall be equipped with closure devices designed to operate with no detectable organic emissions as determined using the procedure specified in Subsection R315-261-1083(d).

(3) Whenever a hazardous secondary material is in the tank, the tank shall be operated as a closed system that does not vent to the atmosphere except under either of the following conditions as specified in Subsection R315-261-1084(h)(3)(i) or (h)(3)(ii).

(i) At those times when opening of a safety device, as defined in Section R315-261-1081, is required to avoid an unsafe condition.

(ii) At those times when purging of inerts from the tank is required and the purge stream is routed to a closed-vent system and control device designed and operated in accordance with the requirements of Section R315-261-1087.

(i) The remanufacturer or other person that stores or treats the hazardous secondary material who controls air pollutant emissions by using an enclosure vented through a closed-vent system to an enclosed combustion control device shall meet the requirements specified in Subsections R315-261-1084(i)(1) through (4).

(1) The tank shall be located inside an enclosure. The enclosure shall be designed and operated in accordance with the criteria for a permanent total enclosure as specified in "Procedure T - Criteria for and Verification of a Permanent or Temporary Total Enclosure" under 40 CFR 52.741, appendix B. The enclosure may have permanent or temporary openings to allow worker access; passage of material into or out of the enclosure by conveyor, vehicles, or other mechanical means; entry of permanent mechanical or electrical equipment; or direct airflow into the enclosure. The remanufacturer or other person that stores or treats the hazardous secondary material shall perform the verification procedure for the enclosure as specified in Section 5.0 to "Procedure T - Criteria for and Verification of a Permanent or Temporary Total Enclosure" initially when the enclosure is first installed and, thereafter, annually.

(2) The enclosure shall be vented through a closed-vent system to an enclosed combustion control device that is designed and operated in accordance with the standards for either a vapor incinerator, boiler, or process heater specified in Section R315-261-1087.

(3) Safety devices, as defined in Section R315-261-1081, may be installed and operated as necessary on any enclosure,

closed-vent system, or control device used to comply with the requirements of Subsections R315-261-1084(i)(1) and (2).

(4) The remanufacturer or other person that stores or treats the hazardous secondary material shall inspect and monitor the closed-vent system and control device as specified in Section R315-261-1087.

(j) The remanufacturer or other person that stores or treats the hazardous secondary material shall transfer hazardous secondary material to a tank subject to Section R315-261-1084 in accordance with the following requirements:

(1) Transfer of hazardous secondary material, except as provided in Subsection R315-261-1084(j)(2), to the tank from another tank subject to Section R315-261-1084 shall be conducted using continuous hard-piping or another closed system that does not allow exposure of the hazardous secondary material to the atmosphere. For the purpose of complying with this provision, an individual drain system is considered to be a closed system when it meets the requirements of 40 CFR part 63, subpart RR - National Emission Standards for Individual Drain Systems.

(2) The requirements of Subsection R315-261-1084(j)(1) do not apply when transferring a hazardous secondary material to the tank under any of the following conditions:

(i) The hazardous secondary material meets the average VO concentration conditions specified in Subsection R315-261-1082(c)(1) at the point of material origination.

(ii) The hazardous secondary material has been treated by an organic destruction or removal process to meet the requirements in Subsection R315-261-1082(c)(2).

(iii) The hazardous secondary material meets the requirements of Subsection R315-261-1082(c)(4).

(k) The remanufacturer or other person that stores or treats the hazardous secondary material shall repair each defect detected during an inspection performed in accordance with the requirements of Subsection R315-261-1084(c)(4), (e)(3), (f)(3), or (g)(3) as follows:

(1) The remanufacturer or other person that stores or treats the hazardous secondary material shall make first efforts at repair of the defect no later than 5 calendar days after detection, and repair shall be completed as soon as possible but no later than 45 calendar days after detection except as provided in Subsection R315-261-1084(k)(2).

(2) Repair of a defect may be delayed beyond 45 calendar days if the remanufacturer or other person that stores or treats the hazardous secondary material determines that repair of the defect requires emptying or temporary removal from service of the tank and no alternative tank capacity is available at the site to accept the hazardous secondary material normally managed in the tank. In this case, the remanufacturer or other person that stores or treats the hazardous secondary material shall repair the defect the next time the process or unit that is generating the hazardous secondary material managed in the tank stops operation. Repair of the defect shall be completed before the process or unit resumes operation.

(l) Following the initial inspection and monitoring of the cover as required by the applicable provisions of Sections R315-261-1080 through 1089, subsequent inspection and monitoring may be performed at intervals longer than 1 year under the following special conditions:

(1) In the case when inspecting or monitoring the cover would expose a worker to dangerous, hazardous, or other unsafe conditions, then the remanufacturer or other person that stores or treats the hazardous secondary material may designate a cover as an "unsafe to inspect and monitor cover" and comply with all of the following requirements:

(i) Prepare a written explanation for the cover stating the reasons why the cover is unsafe to visually inspect or to monitor, if required.

(ii) Develop and implement a written plan and schedule to

inspect and monitor the cover, using the procedures specified in the applicable section of Sections R315-261-1080 through 1089, as frequently as practicable during those times when a worker can safely access the cover.

(2) In the case when a tank is buried partially or entirely underground, a remanufacturer or other person that stores or treats the hazardous secondary material is required to inspect and monitor, as required by the applicable provisions of Section R315-261-1084, only those portions of the tank cover and those connections to the tank, e.g., fill ports, access hatches, gauge wells, etc., that are located on or above the ground surface.

R315-261-1086. Air Emission Standards for Tanks and Containers - Standards: Containers.

(a) Applicability. The provisions of Section R315-261-1086 apply to the control of air pollutant emissions from containers for which Subsection R315-261-1082(b) references the use Section R315-261-1086 for such air emission control.

(b) General requirements.

(1) The remanufacturer or other person that stores or treats the hazardous secondary material shall control air pollutant emissions from each container subject to Section R315-261-1086 in accordance with the following requirements, as applicable to the container.

(i) For a container having a design capacity greater than 0.1 m³ and less than or equal to 0.46 m³, the remanufacturer or other person that stores or treats the hazardous secondary material shall control air pollutant emissions from the container in accordance with the Container Level 1 standards specified in Subsection R315-261-1086(c).

(ii) For a container having a design capacity greater than 0.46 m³ that is not in light material service, the remanufacturer or other person that stores or treats the hazardous secondary material shall control air pollutant emissions from the container in accordance with the Container Level 1 standards specified in Subsection R315-261-1086(c).

(iii) For a container having a design capacity greater than 0.46 m³ that is in light material service, the remanufacturer or other person that stores or treats the hazardous secondary material shall control air pollutant emissions from the container in accordance with the Container Level 2 standards specified in Subsection R315-261-1086(d).

(c) Container Level 1 standards.

(1) A container using Container Level 1 controls is one of the following:

(i) A container that meets the applicable U.S. Department of Transportation regulations on packaging hazardous materials for transportation as specified in Subsection R315-261-1086(f).

(ii) A container equipped with a cover and closure devices that form a continuous barrier over the container openings such that when the cover and closure devices are secured in the closed position there are no visible holes, gaps, or other open spaces into the interior of the container. The cover may be a separate cover installed on the container, e.g., a lid on a drum or a suitably secured tarp on a roll-off box, or may be an integral part of the container structural design, e.g., a "portable tank" or bulk cargo container equipped with a screw-type cap.

(iii) An open-top container in which an organic-vapor suppressing barrier is placed on or over the hazardous secondary material in the container such that no hazardous secondary material is exposed to the atmosphere. One example of such a barrier is application of a suitable organic-vapor suppressing foam.

(2) A container used to meet the requirements of Subsection R315-261-1086(c)(1)(ii) or (iii) shall be equipped with covers and closure devices, as applicable to the container, that are composed of suitable materials to minimize exposure of the hazardous secondary material to the atmosphere and to maintain the equipment integrity, for as long as the container is

in service. Factors to be considered in selecting the materials of construction and designing the cover and closure devices shall include: Organic vapor permeability; the effects of contact with the hazardous secondary material or its vapor managed in the container; the effects of outdoor exposure of the closure device or cover material to wind, moisture, and sunlight; and the operating practices for which the container is intended to be used.

(3) Whenever a hazardous secondary material is in a container using Container Level 1 controls, the remanufacturer or other person that stores or treats the hazardous secondary material shall install all covers and closure devices for the container, as applicable to the container, and secure and maintain each closure device in the closed position except as follows:

(i) Opening of a closure device or cover is allowed for the purpose of adding hazardous secondary material or other material to the container as follows:

(A) In the case when the container is filled to the intended final level in one continuous operation, the remanufacturer or other person that stores or treats the hazardous secondary material shall promptly secure the closure devices in the closed position and install the covers, as applicable to the container, upon conclusion of the filling operation.

(B) In the case when discrete quantities or batches of material intermittently are added to the container over a period of time, the remanufacturer or other person that stores or treats the hazardous secondary material shall promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon either the container being filled to the intended final level; the completion of a batch loading after which no additional material will be added to the container within 15 minutes; the person performing the loading operation leaving the immediate vicinity of the container; or the shutdown of the process generating the hazardous secondary material being added to the container, whichever condition occurs first.

(ii) Opening of a closure device or cover is allowed for the purpose of removing hazardous secondary material from the container as follows:

(A) For the purpose of meeting the requirements of Section R315-261-1086, an empty hazardous secondary material container may be open to the atmosphere at any time, i.e., covers and closure devices on such a container are not required to be secured in the closed position.

(B) In the case when discrete quantities or batches of material are removed from the container, but the container is not an empty hazardous secondary material container, the remanufacturer or other person that stores or treats the hazardous secondary material shall promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon the completion of a batch removal after which no additional material will be removed from the container within 15 minutes or the person performing the unloading operation leaves the immediate vicinity of the container, whichever condition occurs first.

(iii) Opening of a closure device or cover is allowed when access inside the container is needed to perform routine activities other than transfer of hazardous secondary material. Examples of such activities include those times when a worker needs to open a port to measure the depth of or sample the material in the container, or when a worker needs to open a manhole hatch to access equipment inside the container. Following completion of the activity, the remanufacturer or other person that stores or treats the hazardous secondary material shall promptly secure the closure device in the closed position or reinstall the cover, as applicable to the container.

(iv) Opening of a spring-loaded pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device which vents to the atmosphere is allowed during normal

operations for the purpose of maintaining the internal pressure of the container in accordance with the container design specifications. The device shall be designed to operate with no detectable organic emissions when the device is secured in the closed position. The settings at which the device opens shall be established such that the device remains in the closed position whenever the internal pressure of the container is within the internal pressure operating range determined by the remanufacturer or other persons that stores or treats the hazardous secondary material based on container manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, ignitable, explosive, reactive, or hazardous materials. Examples of normal operating conditions that may require these devices to open are during those times when the internal pressure of the container exceeds the internal pressure operating range for the container as a result of loading operations or diurnal ambient temperature fluctuations.

(v) Opening of a safety device, as defined in 40 CFR 261.1081, is allowed at any time conditions require doing so to avoid an unsafe condition.

(4) The remanufacturer or other person that stores or treats the hazardous secondary material using containers with Container Level 1 controls shall inspect the containers and their covers and closure devices as follows:

(i) In the case when a hazardous secondary material already is in the container at the time the remanufacturer or other person that stores or treats the hazardous secondary material first accepts possession of the container at the facility and the container is not emptied within 24 hours after the container is accepted at the facility, i.e., is not an empty hazardous secondary material container, the remanufacturer or other person that stores or treats the hazardous secondary material shall visually inspect the container and its cover and closure devices to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. The container visual inspection shall be conducted on or before the date that the container is accepted at the facility, i.e., the date the container becomes subject to the container standards of Section R315-261-1086.

(ii) In the case when a container used for managing hazardous secondary material remains at the facility for a period of 1 year or more, the remanufacturer or other person that stores or treats the hazardous secondary material shall visually inspect the container and its cover and closure devices initially and thereafter, at least once every 12 months, to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. If a defect is detected, the remanufacturer or other person that stores or treats the hazardous secondary material shall repair the defect in accordance with the requirements of Subsection R315-261-1086(c)(4)(iii).

(iii) When a defect is detected for the container, cover, or closure devices, the remanufacturer or other person that stores or treats the hazardous secondary material shall make first efforts at repair of the defect no later than 24 hours after detection and repair shall be completed as soon as possible but no later than 5 calendar days after detection. If repair of a defect cannot be completed within 5 calendar days, then the hazardous secondary material shall be removed from the container and the container shall not be used to manage hazardous secondary material until the defect is repaired.

(5) The remanufacturer or other person that stores or treats the hazardous secondary material shall maintain at the facility a copy of the procedure used to determine that containers with capacity of 0.46 m³ or greater, which do not meet applicable U.S. Department of Transportation regulations as specified in

Subsection R315-261-1086(f), are not managing hazardous secondary material in light material service.

(d) Container Level 2 standards.

(1) A container using Container Level 2 controls is one of the following:

(i) A container that meets the applicable U.S. Department of Transportation regulations on packaging hazardous materials for transportation as specified in Subsection R315-261-1086(f).

(ii) A container that operates with no detectable organic emissions as defined in Section R315-261-1081 and determined in accordance with the procedure specified in Subsection R315-261-1086(g).

(iii) A container that has been demonstrated within the preceding 12 months to be vapor-tight by using 40 CFR part 60, appendix A, Method 27 in accordance with the procedure specified in Subsection R315-261-1086(h).

(2) Transfer of hazardous secondary material in or out of a container using Container Level 2 controls shall be conducted in such a manner as to minimize exposure of the hazardous secondary material to the atmosphere, to the extent practical, considering the physical properties of the hazardous secondary material and good engineering and safety practices for handling flammable, ignitable, explosive, reactive, or other hazardous materials. Examples of container loading procedures that the Director considers to meet the requirements of Subsection R315-261-1086(d) include using any one of the following: a submerged-fill pipe or other submerged-fill method to load liquids into the container; a vapor-balancing system or a vapor-recovery system to collect and control the vapors displaced from the container during filling operations; or a fitted opening in the top of a container through which the hazardous secondary material is filled and subsequently purging the transfer line before removing it from the container opening.

(3) Whenever a hazardous secondary material is in a container using Container Level 2 controls, the remanufacturer or other person that stores or treats the hazardous secondary material shall install all covers and closure devices for the container, and secure and maintain each closure device in the closed position except as follows:

(i) Opening of a closure device or cover is allowed for the purpose of adding hazardous secondary material or other material to the container as follows:

(A) In the case when the container is filled to the intended final level in one continuous operation, the remanufacturer or other person that stores or treats the hazardous secondary material shall promptly secure the closure devices in the closed position and install the covers, as applicable to the container, upon conclusion of the filling operation.

(B) In the case when discrete quantities or batches of material intermittently are added to the container over a period of time, the remanufacturer or other person that stores or treats the hazardous secondary material shall promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon either the container being filled to the intended final level; the completion of a batch loading after which no additional material will be added to the container within 15 minutes; the person performing the loading operation leaving the immediate vicinity of the container; or the shutdown of the process generating the material being added to the container, whichever condition occurs first.

(ii) Opening of a closure device or cover is allowed for the purpose of removing hazardous secondary material from the container as follows:

(A) For the purpose of meeting the requirements of Section R315-261-1086, an empty hazardous secondary material container may be open to the atmosphere at any time, i.e., covers and closure devices are not required to be secured in the closed position on an empty container.

(B) In the case when discrete quantities or batches of

material are removed from the container, but the container is not an empty hazardous secondary materials container, the remanufacturer or other person that stores or treats the hazardous secondary material shall promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon the completion of a batch removal after which no additional material will be removed from the container within 15 minutes or the person performing the unloading operation leaves the immediate vicinity of the container, whichever condition occurs first.

(iii) Opening of a closure device or cover is allowed when access inside the container is needed to perform routine activities other than transfer of hazardous secondary material. Examples of such activities include those times when a worker needs to open a port to measure the depth of or sample the material in the container, or when a worker needs to open a manhole hatch to access equipment inside the container. Following completion of the activity, the remanufacturer or other person that stores or treats the hazardous secondary material shall promptly secure the closure device in the closed position or reinstall the cover, as applicable to the container.

(iv) Opening of a spring-loaded, pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device which vents to the atmosphere is allowed during normal operations for the purpose of maintaining the internal pressure of the container in accordance with the container design specifications. The device shall be designed to operate with no detectable organic emission when the device is secured in the closed position. The settings at which the device opens shall be established such that the device remains in the closed position whenever the internal pressure of the container is within the internal pressure operating range determined by the remanufacturer or other person that stores or treats the hazardous secondary material based on container manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, ignitable, explosive, reactive, or hazardous materials. Examples of normal operating conditions that may require these devices to open are during those times when the internal pressure of the container exceeds the internal pressure operating range for the container as a result of loading operations or diurnal ambient temperature fluctuations.

(v) Opening of a safety device, as defined in Section R315-261-1081, is allowed at any time conditions require doing so to avoid an unsafe condition.

(4) The remanufacturer or other person that stores or treats the hazardous secondary material using containers with Container Level 2 controls shall inspect the containers and their covers and closure devices as follows:

(i) In the case when a hazardous secondary material already is in the container at the time the remanufacturer or other person that stores or treats the hazardous secondary material first accepts possession of the container at the facility and the container is not emptied within 24 hours after the container is accepted at the facility, i.e., is not an empty hazardous secondary material container, the remanufacturer or other person that stores or treats the hazardous secondary material shall visually inspect the container and its cover and closure devices to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. The container visual inspection shall be conducted on or before the date that the container is accepted at the facility, i.e., the date the container becomes subject to the container standards of Section R315-261-1086.

(ii) In the case when a container used for managing hazardous secondary material remains at the facility for a period of 1 year or more, the remanufacturer or other person that stores

or treats the hazardous secondary material shall visually inspect the container and its cover and closure devices initially and thereafter, at least once every 12 months, to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. If a defect is detected, the remanufacturer or other person that stores or treats the hazardous secondary material shall repair the defect in accordance with the requirements of Subsection R315-261-1086(d)(4)(iii).

(iii) When a defect is detected for the container, cover, or closure devices, the remanufacturer or other person that stores or treats the hazardous secondary material shall make first efforts at repair of the defect no later than 24 hours after detection, and repair shall be completed as soon as possible but no later than 5 calendar days after detection. If repair of a defect cannot be completed within 5 calendar days, then the hazardous secondary material shall be removed from the container and the container shall not be used to manage hazardous secondary material until the defect is repaired.

(e) Container Level 3 standards.

(1) A container using Container Level 3 controls is one of the following:

(i) A container that is vented directly through a closed-vent system to a control device in accordance with the requirements of Subsection R315-261-1086(e)(2)(ii).

(ii) A container that is vented inside an enclosure which is exhausted through a closed-vent system to a control device in accordance with the requirements of Subsections R315-261-1086(e)(2)(i) and (ii).

(2) The remanufacturer or other person that stores or treats the hazardous secondary material shall meet the following requirements, as applicable to the type of air emission control equipment selected by the remanufacturer or other person that stores or treats the hazardous secondary material:

(i) The container enclosure shall be designed and operated in accordance with the criteria for a permanent total enclosure as specified in "Procedure T - Criteria for and Verification of a Permanent or Temporary Total Enclosure" under 40 CFR 52.741, appendix B. The enclosure may have permanent or temporary openings to allow worker access; passage of containers through the enclosure by conveyor or other mechanical means; entry of permanent mechanical or electrical equipment; or direct airflow into the enclosure. The remanufacturer or other person that stores or treats the hazardous secondary material shall perform the verification procedure for the enclosure as specified in Section 5.0 to "Procedure T - Criteria for and Verification of a Permanent or Temporary Total Enclosure" initially when the enclosure is first installed and, thereafter, annually.

(ii) The closed-vent system and control device shall be designed and operated in accordance with the requirements of Section R315-261-1087.

(3) Safety devices, as defined in Section R315-261-1081, may be installed and operated as necessary on any container, enclosure, closed-vent system, or control device used to comply with the requirements of Subsection R315-261-1086(e)(1).

(4) Remanufacturers or other persons that store or treat the hazardous secondary material using Container Level 3 controls in accordance with the provisions of Sections R315-261-1080 through 1089 shall inspect and monitor the closed-vent systems and control devices as specified in Section R315-261-1087.

(5) Remanufacturers or other persons that store or treat the hazardous secondary material that use Container Level 3 controls in accordance with the provisions of Sections R315-261-1080 through 1089 shall prepare and maintain the records specified in Subsection R315-261-1089(d).

(6) Transfer of hazardous secondary material in or out of a container using Container Level 3 controls shall be conducted in such a manner as to minimize exposure of the hazardous

secondary material to the atmosphere, to the extent practical, considering the physical properties of the hazardous secondary material and good engineering and safety practices for handling flammable, ignitable, explosive, reactive, or other hazardous materials. Examples of container loading procedures that the Director considers to meet the requirements of Subsection R315-261-1086(e) include using any one of the following: a submerged-fill pipe or other submerged-fill method to load liquids into the container; a vapor-balancing system or a vapor-recovery system to collect and control the vapors displaced from the container during filling operations; or a fitted opening in the top of a container through which the hazardous secondary material is filled and subsequently purging the transfer line before removing it from the container opening.

(f) For the purpose of compliance with Subsection R315-261-1086(c)(1)(i) or (d)(1)(i), containers shall be used that meet the applicable U.S. Department of Transportation regulations on packaging hazardous materials for transportation as follows:

(1) The container meets the applicable requirements specified in 49 CFR part 178 or part 179.

(2) Hazardous secondary material is managed in the container in accordance with the applicable requirements specified in 49 CFR part 107, subpart B and 49 CFR parts 172, 173, and 180.

(3) For the purpose of complying with Sections R315-261-1080 through 1089, no exceptions to the 49 CFR part 178 or part 179 regulations are allowed.

(g) To determine compliance with the no detectable organic emissions requirement of Subsection R315-261-1086(d)(1)(ii), the procedure specified in Subsection R315-261-1083(d) shall be used.

(1) Each potential leak interface, i.e., a location where organic vapor leakage could occur, on the container, its cover, and associated closure devices, as applicable to the container, shall be checked. Potential leak interfaces that are associated with containers include, but are not limited to: the interface of the cover rim and the container wall; the periphery of any opening on the container or container cover and its associated closure device; and the sealing seat interface on a spring-loaded pressure-relief valve.

(2) The test shall be performed when the container is filled with a material having a volatile organic concentration representative of the range of volatile organic concentrations for the hazardous secondary materials expected to be managed in this type of container. During the test, the container cover and closure devices shall be secured in the closed position.

(h) Procedure for determining a container to be vapor-tight using Method 27 of 40 CFR part 60, appendix A for the purpose of complying with Subsection R315-261-1086(d)(1)(iii).

(1) The test shall be performed in accordance with Method 27 of 40 CFR part 60, appendix A.

(2) A pressure measurement device shall be used that has a precision of +/- 2.5 mm water and that is capable of measuring above the pressure at which the container is to be tested for vapor tightness.

(3) If the test results determined by Method 27 indicate that the container sustains a pressure change less than or equal to 750 Pascals within 5 minutes after it is pressurized to a minimum of 4,500 Pascals, then the container is determined to be vapor-tight.

R315-261-1087. Air Emission Standards for Tanks and Containers - Standards: Closed-Vent Systems and Control Devices.

(a) Section R315-261-1087 applies to each closed-vent system and control device installed and operated by the remanufacturer or other person who stores or treats the hazardous secondary material to control air emissions in accordance with standards of Sections R315-261-1080 through

1089.

(b) The closed-vent system shall meet the following requirements:

(1) The closed-vent system shall route the gases, vapors, and fumes emitted from the hazardous secondary material in the hazardous secondary material management unit to a control device that meets the requirements specified in Subsection R315-261-1087(c).

(2) The closed-vent system shall be designed and operated in accordance with the requirements specified in Subsection R315-261-1033(k).

(3) In the case when the closed-vent system includes bypass devices that could be used to divert the gas or vapor stream to the atmosphere before entering the control device, each bypass device shall be equipped with either a flow indicator as specified in Subsection R315-261-1087(b)(3)(i) or a seal or locking device as specified in Subsection R315-261-1087(b)(3)(ii). For the purpose of complying with Subsection R315-261-1087(b)(3), low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, spring loaded pressure relief valves, and other fittings used for safety purposes are not considered to be bypass devices.

(i) If a flow indicator is used to comply with Subsection R315-261-1087(b)(3), the indicator shall be installed at the inlet to the bypass line used to divert gases and vapors from the closed-vent system to the atmosphere at a point upstream of the control device inlet. For Subsection R315-261-1087(b), a flow indicator means a device which indicates the presence of either gas or vapor flow in the bypass line.

(ii) If a seal or locking device is used to comply with Subsection R315-261-1087(b)(3), the device shall be placed on the mechanism by which the bypass device position is controlled, e.g., valve handle, damper lever, when the bypass device is in the closed position such that the bypass device cannot be opened without breaking the seal or removing the lock. Examples of such devices include, but are not limited to, a car-seal or a lock-and-key configuration valve. The remanufacturer or other person that stores or treats the hazardous secondary material shall visually inspect the seal or closure mechanism at least once every month to verify that the bypass mechanism is maintained in the closed position.

(4) The closed-vent system shall be inspected and monitored by the remanufacturer or other person that stores or treats the hazardous secondary material in accordance with the procedure specified in Subsection R315-261-1033(l).

(c) The control device shall meet the following requirements:

(1) The control device shall be one of the following devices:

(i) A control device designed and operated to reduce the total organic content of the inlet vapor stream vented to the control device by at least 95 percent by weight;

(ii) An enclosed combustion device designed and operated in accordance with the requirements of Subsection R315-261-1033(c); or

(iii) A flare designed and operated in accordance with the requirements of Subsection R315-261-1033(d).

(2) The remanufacturer or other person that stores or treats the hazardous secondary material who elects to use a closed-vent system and control device to comply with the requirements Section R315-261-1087 shall comply with the requirements specified in Subsections R315-261-1087(c)(2)(i) through (vi).

(i) Periods of planned routine maintenance of the control device, during which the control device does not meet the specifications of Subsection R315-261-1087(c)(1)(i), (ii), or (iii), as applicable, shall not exceed 240 hours per year.

(ii) The specifications and requirements in Subsections R315-261-1087(c)(1)(i) through (iii) for control devices do not apply during periods of planned routine maintenance.

(iii) The specifications and requirements in Subsections R315-261-1087(c)(1)(i) through (iii) for control devices do not apply during a control device system malfunction.

(iv) The remanufacturer or other person that stores or treats the hazardous secondary material shall demonstrate compliance with the requirements of Subsection R315-261-1087(c)(2)(i), i.e., planned routine maintenance of a control device, during which the control device does not meet the specifications of Subsection R315-261-1087(c)(1)(i), (ii), or (iii), as applicable, shall not exceed 240 hours per year, by recording the information specified in Subsection R315-261-1089(e)(1)(v).

(v) The remanufacturer or other person that stores or treats the hazardous secondary material shall correct control device system malfunctions as soon as practicable after their occurrence in order to minimize excess emissions of air pollutants.

(vi) The remanufacturer or other person that stores or treats the hazardous secondary material shall operate the closed-vent system such that gases, vapors, or fumes are not actively vented to the control device during periods of planned maintenance or control device system malfunction, i.e., periods when the control device is not operating or not operating normally, except in cases when it is necessary to vent the gases, vapors, and/or fumes to avoid an unsafe condition or to implement malfunction corrective actions or planned maintenance actions.

(3) The remanufacturer or other person that stores or treats the hazardous secondary material using a carbon adsorption system to comply with Subsection R315-261-1087(c)(1) shall operate and maintain the control device in accordance with the following requirements:

(i) Following the initial startup of the control device, all activated carbon in the control device shall be replaced with fresh carbon on a regular basis in accordance with the requirements of Subsection R315-261-1033(g) or (h).

(ii) All carbon that is hazardous waste and that is removed from the control device shall be managed in accordance with the requirements of Subsection R315-261-1033(n), regardless of the average volatile organic concentration of the carbon.

(4) A remanufacturer or other person that stores or treats the hazardous secondary material using a control device other than a thermal vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system to comply with Subsection R315-261-1087(c)(1) shall operate and maintain the control device in accordance with the requirements of Subsection R315-261-1033(j).

(5) The remanufacturer or other person that stores or treats the hazardous secondary material shall demonstrate that a control device achieves the performance requirements of Subsection R315-261-1087(c)(1) as follows:

(i) A remanufacturer or other person that stores or treats the hazardous secondary material shall demonstrate using either a performance test as specified in Subsection R315-261-1087(c)(5)(iii) or a design analysis as specified in Subsection R315-261-1087(c)(5)(iv) the performance of each control device except for the following:

(A) A flare;

(B) A boiler or process heater with a design heat input capacity of 44 megawatts or greater;

(C) A boiler or process heater into which the vent stream is introduced with the primary fuel;

(ii) A remanufacturer or other person that stores or treats the hazardous secondary material shall demonstrate the performance of each flare in accordance with the requirements specified in Subsection R315-261-1033(e).

(iii) For a performance test conducted to meet the requirements of Subsection R315-261-1087(c)(5)(i), the remanufacturer or other person that stores or treats the

hazardous secondary material shall use the test methods and procedures specified in Subsections R315-261-1034(c)(1) through (4).

(iv) For a design analysis conducted to meet the requirements of Subsection R315-261-1087(c)(5)(i), the design analysis shall meet the requirements specified in Subsection R315-261-1035(b)(4)(iii).

(v) The remanufacturer or other person that stores or treats the hazardous secondary material shall demonstrate that a carbon adsorption system achieves the performance requirements of Subsection R315-261-1087(c)(1) based on the total quantity of organics vented to the atmosphere from all carbon adsorption system equipment that is used for organic adsorption, organic desorption or carbon regeneration, organic recovery, and carbon disposal.

(6) If the remanufacturer or other person that stores or treats the hazardous secondary material and the Director do not agree on a demonstration of control device performance using a design analysis then the disagreement shall be resolved using the results of a performance test performed by the remanufacturer or other person that stores or treats the hazardous secondary material in accordance with the requirements of Subsection R315-261-1087(c)(5)(iii). The Director may choose to have an authorized representative observe the performance test.

(7) The closed-vent system and control device shall be inspected and monitored by the remanufacturer or other person that stores or treats the hazardous secondary material in accordance with the procedures specified in Subsections R315-261-1033(f)(2) and (l). The readings from each monitoring device required by Subsection R315-261-1033(f)(2) shall be inspected at least once each operating day to check control device operation. Any necessary corrective measures shall be immediately implemented to ensure the control device is operated in compliance with the requirements Section R315-261-1087.

R315-261-1088. Air Emission Standards for Tanks and Containers - Inspection and Monitoring Requirements.

(a) The remanufacturer or other person that stores or treats the hazardous secondary material shall inspect and monitor air emission control equipment used to comply with Sections R315-261-1080 through 1089 in accordance with the applicable requirements specified in Sections R315-261-1084 through 1087.

(b) The remanufacture or other person that stores or treats the hazardous secondary material shall develop and implement a written plan and schedule to perform the inspections and monitoring required by Subsection R315-261-1088(a). The remanufacturer or other person that stores or treats the hazardous secondary material shall keep the plan and schedule at the facility.

R315-261-1089. Air Emission Standards for Tanks and Containers - Recordkeeping Requirements.

(a) Each remanufacturer or other person that stores or treats the hazardous secondary material subject to requirements of Sections R315-261-1080 through 1089 shall record and maintain the information specified in Subsections R315-261-1089(b) through (j), as applicable to the facility. Except for air emission control equipment design documentation and information required by Subsections R315-261-1089(i) and (j), records required by Section R315-261-1089 shall be maintained at the facility for a minimum of 3 years. Air emission control equipment design documentation shall be maintained at the facility until the air emission control equipment is replaced or otherwise no longer in service. Information required by Subsections R315-261-1089(i) and (j) shall be maintained at the facility for as long as the hazardous secondary material

management unit is not using air emission controls specified in Sections R315-261-1084 through 1087 in accordance with the conditions specified in Subsection R315-261-1080(b)(7) or (d), respectively.

(b) The remanufacturer or other person that stores or treats the hazardous secondary material using a tank with air emission controls in accordance with the requirements of Section R315-261-1084 shall prepare and maintain records for the tank that include the following information:

(1) For each tank using air emission controls in accordance with the requirements of Section R315-261-1084, the remanufacturer or other person that stores or treats the hazardous secondary material shall record:

(i) A tank identification number (or other unique identification description as selected by the remanufacturer or other person that stores or treats the hazardous secondary material).

(ii) A record for each inspection required by Section R315-261-1084 that includes the following information:

(A) Date inspection was conducted.

(B) For each defect detected during the inspection: The location of the defect, a description of the defect, the date of detection, and corrective action taken to repair the defect. In the event that repair of the defect is delayed in accordance with the requirements of Section R315-261-1084, the remanufacturer or other person that stores or treats the hazardous secondary material shall also record the reason for the delay and the date that completion of repair of the defect is expected.

(2) In addition to the information required by Subsection R315-261-1089(b)(1), the remanufacturer or other person that stores or treats the hazardous secondary material shall record the following information, as applicable to the tank:

(i) The remanufacturer or other person that stores or treats the hazardous secondary material using a fixed roof to comply with the Tank Level 1 control requirements specified in Subsection R315-261-1084(c) shall prepare and maintain records for each determination for the maximum organic vapor pressure of the hazardous secondary material in the tank performed in accordance with the requirements of Subsection R315-261-1084(c). The records shall include the date and time the samples were collected, the analysis method used, and the analysis results.

(ii) The remanufacturer or other person that stores or treats the hazardous secondary material using an internal floating roof to comply with the Tank Level 2 control requirements specified in Subsection R315-261-1084(e) shall prepare and maintain documentation describing the floating roof design.

(iii) Remanufacturer or other persons that store or treat the hazardous secondary material using an external floating roof to comply with the Tank Level 2 control requirements specified in Subsection R315-261-1084(f) shall prepare and maintain the following records:

(A) Documentation describing the floating roof design and the dimensions of the tank.

(B) Records for each seal gap inspection required by Subsection R315-261-1084(f)(3) describing the results of the seal gap measurements. The records shall include the date that the measurements were performed, the raw data obtained for the measurements, and the calculations of the total gap surface area. In the event that the seal gap measurements do not conform to the specifications in Subsection R315-261-1084(f)(1), the records shall include a description of the repairs that were made, the date the repairs were made, and the date the tank was emptied, if necessary.

(iv) Each remanufacturer or other person that stores or treats the hazardous secondary material using an enclosure to comply with the Tank Level 2 control requirements specified in Subsection R315-261-1084(i) shall prepare and maintain the following records:

(A) Records for the most recent set of calculations and measurements performed by the remanufacturer or other person that stores or treats the hazardous secondary material to verify that the enclosure meets the criteria of a permanent total enclosure as specified in "Procedure T - Criteria for and Verification of a Permanent or Temporary Total Enclosure" under 40 CFR 52.741, appendix B.

(B) Records required for the closed-vent system and control device in accordance with the requirements of Subsection R315-261-1089(e).

(c) Reserved

(d) The remanufacturer or other person that stores or treats the hazardous secondary material using containers with Container Level 3 air emission controls in accordance with the requirements of Subsection R315-261-1086 shall prepare and maintain records that include the following information:

(1) Records for the most recent set of calculations and measurements performed by the remanufacturer or other person that stores or treats the hazardous secondary material to verify that the enclosure meets the criteria of a permanent total enclosure as specified in "Procedure T - Criteria for and Verification of a Permanent or Temporary Total Enclosure" under 40 CFR 52.741, appendix B.

(2) Records required for the closed-vent system and control device in accordance with the requirements of Subsection R315-261-1089(e).

(e) The remanufacturer or other person that stores or treats the hazardous secondary material using a closed-vent system and control device in accordance with the requirements of Subsection R315-261-1087 shall prepare and maintain records that include the following information:

(1) Documentation for the closed-vent system and control device that includes:

(i) Certification that is signed and dated by the remanufacturer or other person that stores or treats the hazardous secondary material stating that the control device is designed to operate at the performance level documented by a design analysis as specified in Subsection R315-261-1089(e)(1)(ii) or by performance tests as specified in Subsection R315-261-1089(e)(1)(iii) when the tank or container is or would be operating at capacity or the highest level reasonably expected to occur.

(ii) If a design analysis is used, then design documentation as specified in Subsection R315-261-1035(b)(4). The documentation shall include information prepared by the remanufacturer or other person that stores or treats the hazardous secondary material or provided by the control device manufacturer or vendor that describes the control device design in accordance with Subsection R315-261-1035(b)(4)(iii) and certification by the remanufacturer or other person that stores or treats the hazardous secondary material that the control equipment meets the applicable specifications.

(iii) If performance tests are used, then a performance test plan as specified in Subsection R315-261-1035(b)(3) and all test results.

(iv) Information as required by Subsections R315-261-1035(c)(1) and 261.1035(c)(2), as applicable.

(v) A remanufacturer or other person that stores or treats the hazardous secondary material shall record, on a semiannual basis, the information specified in Subsections R315-261-1089(e)(1)(v)(A) and (B) for those planned routine maintenance operations that would require the control device not to meet the requirements of Subsection R315-261-1087(c)(1)(i), (ii), or (iii), as applicable.

(A) A description of the planned routine maintenance that is anticipated to be performed for the control device during the next 6-month period. This description shall include the type of maintenance necessary, planned frequency of maintenance, and lengths of maintenance periods.

(B) A description of the planned routine maintenance that was performed for the control device during the previous 6-month period. This description shall include the type of maintenance performed and the total number of hours during those 6 months that the control device did not meet the requirements of Subsection R315-261-1087(c)(1)(i), (ii), or (iii), as applicable, due to planned routine maintenance.

(vi) A remanufacturer or other person that stores or treats the hazardous secondary material shall record the information specified in Subsections R315-261-1089(e)(1)(vi)(A) through (C) for those unexpected control device system malfunctions that would require the control device not to meet the requirements of Subsection R315-261-1087(c)(1)(i), (ii), or (iii), as applicable.

(A) The occurrence and duration of each malfunction of the control device system.

(B) The duration of each period during a malfunction when gases, vapors, or fumes are vented from the hazardous secondary material management unit through the closed-vent system to the control device while the control device is not properly functioning.

(C) Actions taken during periods of malfunction to restore a malfunctioning control device to its normal or usual manner of operation.

(vii) Records of the management of carbon removed from a carbon adsorption system conducted in accordance with Subsection R315-261-1087(c)(3)(ii).

(f) The remanufacturer or other person that stores or treats the hazardous secondary material using a tank or container exempted under the hazardous secondary material organic concentration conditions specified in Subsections R315-261-1082(c)(1) or (c)(2)(i) through (vi), shall prepare and maintain at the facility records documenting the information used for each material determination, e.g., test results, measurements, calculations, and other documentation. If analysis results for material samples are used for the material determination, then the remanufacturer or other person that stores or treats the hazardous secondary material shall record the date, time, and location that each material sample is collected in accordance with applicable requirements of Section R315-261-1083.

(g) A remanufacturer or other person that stores or treats the hazardous secondary material designating a cover as "unsafe to inspect and monitor" pursuant to Subsection R315-261-1084(l) or Subsection R315-261-1085(g) shall record and keep at facility the following information: The identification numbers for hazardous secondary material management units with covers that are designated as "unsafe to inspect and monitor," the explanation for each cover stating why the cover is unsafe to inspect and monitor, and the plan and schedule for inspecting and monitoring each cover.

(h) The remanufacturer or other person that stores or treats the hazardous secondary material that is subject to Sections R315-261-1080 through 1089 and to the control device standards in 40 CFR part 60, subpart VV, or 40 CFR part 61, subpart V, may elect to demonstrate compliance with the applicable sections of Sections R315-261-1080 through 1089 by documentation either pursuant to Sections R315-261-1080 through 1089, or pursuant to the provisions of 40 CFR part 60, subpart VV or 40 CFR part 61, subpart V, to the extent that the documentation required by 40 CFR parts 60 or 61 duplicates the documentation required by Section R315-261-1089.

R315-261-1090. Appendix I to Rule R315-261 -- Representative Sampling Methods.

The methods and equipment used for sampling waste materials will vary with the form and consistency of the waste materials to be sampled. Samples collected using the sampling protocols listed below, for sampling waste with properties similar to the indicated materials, shall be considered by the

Agency to be representative of the waste.

Extremely viscous liquid-ASTM Standard D140-70
Crushed or powdered material-ASTM Standard D346-75 Soil
or rock-like material-ASTM Standard D420-69 Soil-like
material-ASTM Standard D1452-65

Fly Ash-like material-ASTM Standard D2234-76, ASTM
Standards are available from ASTM, 1916 Race St.,
Philadelphia, PA 19103

Containerized liquid waste-"COLIWASA."

Liquid waste in pits, ponds, lagoons, and similar reservoirs-
"Pond Sampler."

This manual also contains additional information on
application of these protocols.

**R315-261-1091. Appendix VII to Rule R315-261-Basis for
Listing Hazardous Waste.**

TABLE

EPA hazardous waste No.	Hazardous constituents for which listed	
F001	Tetrachloroethylene, methylene chloride trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, chlorinated fluorocarbons.	
F002	Tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, ortho-dichlorobenzene, trichlorofluoromethane.	
F003	N.A.	
F004	Cresols and cresylic acid, nitrobenzene.	
F005	Toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, 2-ethoxyethanol, benzene, 2-nitropropane.	
F006	Cadmium, hexavalent chromium, nickel, cyanide (complexed).	
F007	Cyanide (salts).	
F008	Cyanide (salts).	
F009	Cyanide (salts).	
F010	Cyanide (salts).	
F011	Cyanide (salts).	
F012	Cyanide (complexed).	
F019	Hexavalent chromium, cyanide (complexed).	
F020	Tetra- and pentachlorodibenzo-p-dioxins; tetra and pentachlorodi-benzofurans; tri- and tetrachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts.	
F021	Penta- and hexachlorodibenzo-p- dioxins; penta- and hexachlorodibenzofurans; pentachlorophenol and its derivatives.	
F022	Tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans.	
F023	Tetra-, and pentachlorodibenzo-p-dioxins; tetra- and pentachlorodibenzofurans; tri- and tetrachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts.	
F024	Chloromethane, dichloromethane, trichloromethane, carbon tetrachloride, chloroethylene, 1,1-dichloroethane, 1,2-dichloroethane, trans-1,2-dichloroethylene, 1,1-dichloroethylene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, trichloroethylene, 1,1,1,2-tetra-chloroethane, 1,1,2,2-tetrachloroethane, tetrachloroethylene, pentachloroethane, hexachloroethane, allyl chloride (3-chloropropene), dichloropropane, dichloropropene, 2-chloro-1,3-butadiene, hexachloro-1,3-butadiene, hexachlorocyclopentadiene, hexachlorocyclohexane, benzene, chlorobenzene, dichlorobenzenes, 1,2,4-trichlorobenzene, tetrachlorobenzene, pentachlorobenzene, hexachlorobenzene, toluene, naphthalene.	
F025	Chloromethane; Dichloromethane; Trichloromethane; Carbon tetrachloride; Chloroethylene; 1,1-Dichloroethane; 1,2-Dichloroethane; trans-1,2-Dichloroethylene; 1,1-Dichloroethylene; 1,1,1-Trichloroethane; 1,1,2-Trichloroethane; Trichloroethylene; 1,1,1,2-Tetrachloroethane; 1,1,2,2-Tetrachloroethane;	
	Tetrachloroethylene; Pentachloroethane; Hexachloroethane; Allyl chloride (3-Chloropropene); Dichloropropane; Dichloropropene; 2-Chloro-1,3-butadiene; Hexachloro-1,3-butadiene; Hexachlorocyclopentadiene; Benzene; Chlorobenzene; Dichlorobenzene; 1,2,4-Trichlorobenzene; Tetrachlorobenzene; Pentachlorobenzene; Hexachlorobenzene; Toluene; Naphthalene.	F026
	Tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans.	F027
	Tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans; tri-, tetra-, and pentachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts.	F028
	Tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans; tri-, tetra-, and pentachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts.	F032
	Benz(a)anthracene, benzo(a)pyrene, dibenz(a,h)-anthracene, indeno(1,2,3-cd)pyrene, pentachlorophenol, arsenic, chromium, tetra-, penta-, hexa-, heptachlorodibenzo-p-dioxins, tetra-, penta-, hexa-, heptachlorodibenzofurans.	F034
	Benz(a)anthracene, benzo(k)fluoranthene, benzo(a)pyrene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, naphthalene, arsenic, chromium.	F035
	Arsenic, chromium, lead.	F037
	Benzene, benzo(a)pyrene, chrysene, lead, chromium.	F038
	All constituents for which treatment standards are specified for multi-source leachate (wastewaters and nonwastewaters) under Section R315-268-43, Table CCW.	F999
	CX, GA, GB, GD, H, HD, HL, HN-1, HN-2, HN-3, HT, L, T, and VX.	K001
	Pentachlorophenol, phenol, 2-chlorophenol, p-chloro-m-cresol, 2,4-dimethylphenyl, 2,4-dinitrophenol, trichlorophenols, tetrachlorophenols, 2,4-dinitrophenol, creosote, chrysene, naphthalene, fluoranthene, benzo(b)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, benz(a)anthracene, dibenz(a)anthracene, acenaphthalene.	K002
	Hexavalent chromium, lead	K003
	Hexavalent chromium, lead.	K004
	Hexavalent chromium.	K005
	Hexavalent chromium, lead.	K006
	Hexavalent chromium.	K007
	Cyanide (complexed), hexavalent chromium.	K008
	Hexavalent chromium.	K009
	Chloroform, formaldehyde, methylene chloride, methyl chloride, paraldehyde, formic acid.	K010
	Chloroform, formaldehyde, methylene chloride, methyl chloride, paraldehyde, formic acid, chloroacetaldehyde.	K011
	Acrylonitrile, acetonitrile, hydrocyanic acid.	K013
	Hydrocyanic acid, acrylonitrile, acetonitrile.	K014
	Acetonitrile, acrylamide.	K015
	Benzyl chloride, chlorobenzene, toluene, benzotrichloride.	K016
	Hexachlorobenzene, hexachlorobutadiene, carbon tetrachloride, hexachloroethane, perchloroethylene.	K017
	Epichlorohydrin, chloroethers (bis(chloromethyl) ether and bis (2-chloroethyl) ethers), trichloropropane, dichloropropanols.	K018
	1,2-dichloroethane, trichloroethylene, hexachlorobutadiene, hexachlorobenzene.	K019
	Ethylene dichloride, 1,1,1-trichloroethane, 1,1,2-trichloroethane, tetrachloroethanes (1,1,2,2-tetrachloroethane and 1,1,1,2-tetrachloroethane), trichloroethylene, tetrachloroethylene, carbon tetrachloride, chloroform, vinyl chloride, vinylidene chloride.	K020
	Ethylene dichloride, 1,1,1-trichloroethane, 1,1,2-trichloroethane, tetrachloroethanes (1,1,2,2-tetrachloroethane and 1,1,1,2-tetrachloroethane), trichloroethylene, tetrachloroethylene, carbon tetrachloride, chloroform, vinyl chloride, vinylidene chloride.	

K021	Antimony, carbon tetrachloride, chloroform.		aniline.
K022	Phenol, tars (polycyclic aromatic hydrocarbons).	K114	2,4-Toluenediamine, o-toluidine, p-toluidine.
K023	Phthalic anhydride, maleic anhydride.	K115	2,4-Toluenediamine.
K024	Phthalic anhydride, 1,4-naphthoquinone.	K116	Carbon tetrachloride, tetrachloroethylene, chloroform, phosgene.
K025	Meta-dinitrobenzene, 2,4-dinitrotoluene.		Ethylene dibromide.
K026	Paraldehyde, pyridines, 2-picoline.	K117	Ethylene dibromide.
K027	Toluene diisocyanate, toluene-2, 4-diamine.	K118	Ethylene thiourea.
K028	1,1,1-trichloroethane, vinyl chloride.	K123	Ethylene thiourea.
K029	1,2-dichloroethane, 1,1,1-trichloroethane, vinyl chloride, vinylidene chloride, chloroform.	K124	Ethylene thiourea.
K030	Hexachlorobenzene, hexachlorobutadiene, hexachloroethane, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, ethylene dichloride.	K125	Ethylene thiourea.
K031	Arsenic.	K126	Ethylene thiourea.
K032	Hexachlorocyclopentadiene.	K131	Dimethyl sulfate, methyl bromide.
K033	Hexachlorocyclopentadiene.	K132	Methyl bromide.
K034	Hexachlorocyclopentadiene.	K136	Ethylene dibromide.
K035	Creosote, chrysene, naphthalene, fluoranthene benzo(b) fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd) pyrene, benzo(a)anthracene, dibenzo(a)anthracene, acenaphthalene.	K141	Benzene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene.
K036	Toluene, phosphorodithioic and phosphorothioic acid esters.	K142	Benzenz, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene.
K037	Toluene, phosphorodithioic and phosphorothioic acid esters.	K143	Benzenz, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene.
K038	Phorate, formaldehyde, phosphorodithioic and phosphorothioic acid esters.	K144	Benzenz, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene.
K039	Phosphorodithioic and phosphorothioic acid esters.	K145	Benzenz, benz(a)anthracene, benzo(a)pyrene, dibenz(a,h)anthracene, naphthalene.
K040	Phorate, formaldehyde, phosphorodithioic and phosphorothioic acid esters.	K147	Benzenz, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene.
K041	Toxaphene.	K148	Benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene.
K042	Hexachlorobenzene, ortho-dichlorobenzene.		Benzotrichloride, benzyl chloride, chloroform, chloromethane, chlorobenzene, 1,4-dichlorobenzene, hexachlorobenzene, pentachlorobenzene, 1,2,4,5-tetrachlorobenzene, toluene.
K043	2,4-dichlorophenol, 2,6-dichlorophenol, 2,4,6-trichlorophenol.	K149	Carbon tetrachloride, chloroform, chloromethane, 1,4-dichlorobenzene, hexachlorobenzene, pentachlorobenzene, 1,2,4,5-tetrachlorobenzene, 1,1,2,2-tetrachloroethane, tetrachloroethylene, 1,2,4-trichlorobenzene.
K044	N.A.		Benzenz, carbon tetrachloride, chloroform, hexachlorobenzene, pentachlorobenzene, toluene, 1,2,4,5-tetrachlorobenzene, tetrachloroethylene.
K045	N.A.		Benzenz, carbon tetrachloride, chloroform, hexachlorobenzene, pentachlorobenzene, toluene, 1,2,4,5-tetrachlorobenzene, tetrachloroethylene, 1,2,4-trichlorobenzene.
K046	Lead.	K150	Benzenz, carbon tetrachloride, chloroform, hexachlorobenzene, pentachlorobenzene, toluene, 1,2,4,5-tetrachlorobenzene, tetrachloroethylene, 1,2,4-trichlorobenzene.
K047	N.A.		Benzenz, carbon tetrachloride, chloroform, hexachlorobenzene, pentachlorobenzene, toluene, 1,2,4,5-tetrachlorobenzene, tetrachloroethylene, 1,2,4-trichlorobenzene.
K048	Hexavalent chromium, lead.		Benzenz, carbon tetrachloride, chloroform, hexachlorobenzene, pentachlorobenzene, toluene, 1,2,4,5-tetrachlorobenzene, tetrachloroethylene, 1,2,4-trichlorobenzene.
K049	Hexavalent chromium, lead.		Benzenz, carbon tetrachloride, chloroform, hexachlorobenzene, pentachlorobenzene, toluene, 1,2,4,5-tetrachlorobenzene, tetrachloroethylene, 1,2,4-trichlorobenzene.
K050	Hexavalent chromium.		Benzenz, carbon tetrachloride, chloroform, hexachlorobenzene, pentachlorobenzene, toluene, 1,2,4,5-tetrachlorobenzene, tetrachloroethylene, 1,2,4-trichlorobenzene.
K051	Hexavalent chromium, lead.		Benzenz, carbon tetrachloride, chloroform, hexachlorobenzene, pentachlorobenzene, toluene, 1,2,4,5-tetrachlorobenzene, tetrachloroethylene, 1,2,4-trichlorobenzene.
K052	Lead.	K151	Benzenz, carbon tetrachloride, chloroform, hexachlorobenzene, pentachlorobenzene, toluene, 1,2,4,5-tetrachlorobenzene, tetrachloroethylene, 1,2,4-trichlorobenzene.
K060	Cyanide, naphthalene, phenolic compounds, arsenic.	K155	Benzenz, carbon tetrachloride, chloroform, hexachlorobenzene, pentachlorobenzene, toluene, 1,2,4,5-tetrachlorobenzene, tetrachloroethylene, 1,2,4-trichlorobenzene.
K061	Hexavalent chromium, lead, cadmium.		Benzenz, carbon tetrachloride, chloroform, hexachlorobenzene, pentachlorobenzene, toluene, 1,2,4,5-tetrachlorobenzene, tetrachloroethylene, 1,2,4-trichlorobenzene.
K062	Hexavalent chromium, lead.		Benzenz, carbon tetrachloride, chloroform, hexachlorobenzene, pentachlorobenzene, toluene, 1,2,4,5-tetrachlorobenzene, tetrachloroethylene, 1,2,4-trichlorobenzene.
K069	Hexavalent chromium, lead, cadmium.		Benzenz, carbon tetrachloride, chloroform, hexachlorobenzene, pentachlorobenzene, toluene, 1,2,4,5-tetrachlorobenzene, tetrachloroethylene, 1,2,4-trichlorobenzene.
K071	Mercury.	K157	Benzenz, carbon tetrachloride, chloroform, hexachlorobenzene, pentachlorobenzene, toluene, 1,2,4,5-tetrachlorobenzene, tetrachloroethylene, 1,2,4-trichlorobenzene.
K073	Chloroform, carbon tetrachloride, hexachloroethane, trichloroethane, tetrachloroethylene, dichloroethylene, 1,1,2,2-tetrachloroethane.	K158	Benzenz, carbon tetrachloride, chloroform, hexachlorobenzene, pentachlorobenzene, toluene, 1,2,4,5-tetrachlorobenzene, tetrachloroethylene, 1,2,4-trichlorobenzene.
K083	Aniline, diphenylamine, nitrobenzene, phenylenediamine.	K159	Benzenz, carbon tetrachloride, chloroform, hexachlorobenzene, pentachlorobenzene, toluene, 1,2,4,5-tetrachlorobenzene, tetrachloroethylene, 1,2,4-trichlorobenzene.
K084	Arsenic.		Benzenz, carbon tetrachloride, chloroform, hexachlorobenzene, pentachlorobenzene, toluene, 1,2,4,5-tetrachlorobenzene, tetrachloroethylene, 1,2,4-trichlorobenzene.
K085	Benzenz, dichlorobenzenes, trichlorobenzenes, tetrachlorobenzenes, pentachlorobenzene, hexachlorobenzene, benzyl chloride.	K161	Benzenz, carbon tetrachloride, chloroform, hexachlorobenzene, pentachlorobenzene, toluene, 1,2,4,5-tetrachlorobenzene, tetrachloroethylene, 1,2,4-trichlorobenzene.
K086	Lead, hexavalent chromium.	K169	Benzenz, carbon tetrachloride, chloroform, hexachlorobenzene, pentachlorobenzene, toluene, 1,2,4,5-tetrachlorobenzene, tetrachloroethylene, 1,2,4-trichlorobenzene.
K087	Phenol, naphthalene.	K170	Benzenz, carbon tetrachloride, chloroform, hexachlorobenzene, pentachlorobenzene, toluene, 1,2,4,5-tetrachlorobenzene, tetrachloroethylene, 1,2,4-trichlorobenzene.
K088	Cyanide (complexes).		Benzenz, carbon tetrachloride, chloroform, hexachlorobenzene, pentachlorobenzene, toluene, 1,2,4,5-tetrachlorobenzene, tetrachloroethylene, 1,2,4-trichlorobenzene.
K093	Phthalic anhydride, maleic anhydride.	K171	Benzenz, carbon tetrachloride, chloroform, hexachlorobenzene, pentachlorobenzene, toluene, 1,2,4,5-tetrachlorobenzene, tetrachloroethylene, 1,2,4-trichlorobenzene.
K094	Phthalic anhydride.K095	K172	Benzenz, carbon tetrachloride, chloroform, hexachlorobenzene, pentachlorobenzene, toluene, 1,2,4,5-tetrachlorobenzene, tetrachloroethylene, 1,2,4-trichlorobenzene.
1,1,1,2-	1,1,2-trichloroethane,	K174	Benzenz, carbon tetrachloride, chloroform, hexachlorobenzene, pentachlorobenzene, toluene, 1,2,4,5-tetrachlorobenzene, tetrachloroethylene, 1,2,4-trichlorobenzene.
K096	tetrachloroethane, 1,1,2,2-tetrachloroethane, 1,2-dichloroethane, 1,1,1-trichloroethane, 1,1,2-trichloroethane.		Benzenz, carbon tetrachloride, chloroform, hexachlorobenzene, pentachlorobenzene, toluene, 1,2,4,5-tetrachlorobenzene, tetrachloroethylene, 1,2,4-trichlorobenzene.
K097	Chlordane, heptachlor.		Benzenz, carbon tetrachloride, chloroform, hexachlorobenzene, pentachlorobenzene, toluene, 1,2,4,5-tetrachlorobenzene, tetrachloroethylene, 1,2,4-trichlorobenzene.
K098	Toxaphene.		Benzenz, carbon tetrachloride, chloroform, hexachlorobenzene, pentachlorobenzene, toluene, 1,2,4,5-tetrachlorobenzene, tetrachloroethylene, 1,2,4-trichlorobenzene.
K099	2,4-dichlorophenol, 2,4,6-trichlorophenol.		Benzenz, carbon tetrachloride, chloroform, hexachlorobenzene, pentachlorobenzene, toluene, 1,2,4,5-tetrachlorobenzene, tetrachloroethylene, 1,2,4-trichlorobenzene.
K100	Hexavalent chromium, lead, cadmium.		Benzenz, carbon tetrachloride, chloroform, hexachlorobenzene, pentachlorobenzene, toluene, 1,2,4,5-tetrachlorobenzene, tetrachloroethylene, 1,2,4-trichlorobenzene.
K101	Arsenic.		Benzenz, carbon tetrachloride, chloroform, hexachlorobenzene, pentachlorobenzene, toluene, 1,2,4,5-tetrachlorobenzene, tetrachloroethylene, 1,2,4-trichlorobenzene.
K102	Arsenic.		Benzenz, carbon tetrachloride, chloroform, hexachlorobenzene, pentachlorobenzene, toluene, 1,2,4,5-tetrachlorobenzene, tetrachloroethylene, 1,2,4-trichlorobenzene.
K103	Aniline, nitrobenzene, phenylenediamine.		Benzenz, carbon tetrachloride, chloroform, hexachlorobenzene, pentachlorobenzene, toluene, 1,2,4,5-tetrachlorobenzene, tetrachloroethylene, 1,2,4-trichlorobenzene.
K104	Aniline, benzene, diphenylamine, nitrobenzene, phenylenediamine.		Benzenz, carbon tetrachloride, chloroform, hexachlorobenzene, pentachlorobenzene, toluene, 1,2,4,5-tetrachlorobenzene, tetrachloroethylene, 1,2,4-trichlorobenzene.
K105	Benzenz, monochlorobenzene, dichlorobenzenes, 2,4,6-trichlorophenol.	K175	Mercury
K106	Mercury.	K176	Arsenic, Lead.
K107	1,1-Dimethylhydrazine (UDMH).	K177	Antimony.
K108	1,1-Dimethylhydrazine (UDMH).	K178	Thallium.
K109	1,1-Dimethylhydrazine (UDMH).		
K110	1,1-Dimethylhydrazine (UDMH).	K181	Aniline, o-anisidine, 4-chloroaniline, p-cresidine, 2,4-dimethylaniline, 1,2-phenylenediamine, 1,3-phenylenediamine.
K111	2,4-Dinitrotoluene.		
K112	2,4-Toluenediamine, o-toluidine, p-toluidine, aniline.		
K113	2,4-Toluenediamine, o-toluidine, p-toluidine,		

N.A.-Waste is hazardous because it fails the test for the characteristic of ignitability, corrosivity, or reactivity.

R315-261-1092. Appendix VIII to Rule 315-261-Hazardous

Constituents.

Appendix VIII to 40 CFR Part 261, 2015 Ed., is adopted and incorporated by reference, with the following addition:

(a) P999 - CX, GA, GB, GD, H, HD, HL, HN-1, HN-2, HN-3, HT, L, T, and VX.

R315-261-1093. Appendix IX to Rule 315-261-Hazardous Constituents.

Appendix IX to 40 CFR Part 261, 2015 Ed., is adopted and incorporated by reference

**KEY: hazardous waste
August 31, 2017**

**19-6-105
19-6-106**

R315. Environmental Quality, Waste Management and Radiation Control, Waste Management.

R315-262. Hazardous Waste Generator Requirements.

R315-262-1. General -- Terms Used in this Part.

(a) As used in Rule R315-262:

(1) "Condition for exemption" means any requirement in Sections R315-262-14, R315-262-15, R315-262-16, R315-262-17, R315-262-70, or Sections R315-262-200 through R315-262-216 or Sections R315-262-230 through R315-262-233 that states an event, action, or standard that shall occur or be met in order to obtain an exemption from any applicable requirement in Rule R315-124, R315-264 through R315-268, and R315-270, or from any requirement for notification under section 3010 of RCRA.

(2) "Independent requirement" means a requirement of Rule R315-262 that states an event, action, or standard that shall occur or be met; and that applies without relation to, or irrespective of, the purpose of obtaining a conditional exemption from storage facility permit, interim status, and operating requirements under Sections R315-262-14, R315-262-15, R315-262-16, R315-262-17, or Sections R315-262-200 through R315-262-216 or Sections R315-262-230 through R315-262-233.

R315-262-10. General -- Purpose, Scope, and Applicability.

(a) The regulations in Rule R315-262 establish standards for generators of hazardous waste as defined by Section R315-260-10.

(1) A person who generates a hazardous waste as defined by Rule R315-261 is subject to all the applicable independent requirements in the sections listed below:

(i) Independent requirements of a very small quantity generator.

(A) Subsections R315-262-11(a) through (d) Hazardous waste determination and recordkeeping; and

(B) Section R315-262-13 Generator category determination.

(ii) Independent requirements of a small quantity generator.

(A) Section R315-262-11 Hazardous waste determination and recordkeeping;

(B) Section R315-262-13 Generator category determination;

(C) Section R315-262-18 EPA identification numbers and re-notification for small quantity generators and large quantity generators;

(D) Sections R315-262-20 through R315-262-27--Manifest requirements applicable to small and large quantity generators;

(E) Sections R315-262-30 through R315-262-34--Pre-transport requirements applicable to small and large quantity generators;

(F) Section R315-262-40 Recordkeeping;

(G) Section R315-262-44 Recordkeeping for small quantity generators; and

(H) Sections R315-262-80 through R315-262-89--Transboundary movements of hazardous waste for recovery or disposal.

(iii) Independent requirements of a large quantity generator.

(A) Section R315-262-11 Hazardous waste determination and recordkeeping;

(B) Section R315-262-13 Generator category determination;

(C) Section R315-262-18 EPA identification numbers and re-notification for small quantity generators and large quantity generators;

(D) Sections R315-262-20 through R315-262-27--Manifest requirements applicable to small and large quantity

generators;

(E) Sections R315-262-30 through R315-262-34--Pre-transport requirements applicable to small and large quantity generators;

(F) Sections R315-262-40 through R315-262-44--Recordkeeping and reporting applicable to small and large quantity generators, except Section R315-262-44; and

(G) Sections R315-262-80 through R315-262-89--Transboundary movements of hazardous waste for recovery or disposal.

(2) A generator that accumulates hazardous waste on site is a person that stores hazardous waste; such generator is subject to the applicable requirements of Rule R315-124, R315-264 through R315-266, R315-270 and section 3010 of RCRA, unless it is one of the following:

(i) A very small quantity generator that meets the conditions for exemption in Section R315-262-14;

(ii) A small quantity generator that meets the conditions for exemption in Sections R315-262-15 and R315-262-16; or

(iii) A large quantity generator that meets the conditions for exemption in Sections R315-262-15 and R315-262-17.

(3) A generator shall not transport, offer its hazardous waste for transport, or otherwise cause its hazardous waste to be sent to a facility that is not a designated facility, as defined in Section R315-260-10, or not otherwise authorized to receive the generator's hazardous waste.

(b) Determining generator category. A generator shall use Section R315-262-13 to determine which provisions of Rule R315-262 are applicable to the generator based on the quantity of hazardous waste generated per calendar month.

(c) Reserved.

(d) Any person who exports or imports hazardous wastes shall comply with Section R315-262-18 and Sections R315-262-80 through R315-262-89.

(e) Any person who imports hazardous waste into the United States shall comply with the standards applicable to generators established in Rule R315-262.

(f) A farmer who generates waste pesticides which are hazardous waste and who complies with all of the requirements of Section R315-262-70 is not required to comply with other standards in Rule R315-262 or Rules R315-270, 264, 265, or 268 with respect to such pesticides.

(1) A generator's violation of an independent requirement is subject to penalty and injunctive relief under Sections 19-6-112 and 19-6-113.

(2) A generator's noncompliance with a condition for exemption in Rule R315-262 is not subject to penalty or injunctive relief under Sections 19-6-112 and 19-6-113 as a violation of a Rule R315-262 condition for exemption. Noncompliance by any generator with an applicable condition for exemption from storage permit and operations requirements means that the facility is a storage facility operating without an exemption from the permit, interim status, and operations requirements in Rules R315-124, R315-264 through R315-266, and R315-270, and the notification requirements of section 3010 of RCRA. Without an exemption, any violations of such storage requirements are subject to penalty and injunctive relief under Sections 19-6-112 and 19-6-113.

(h) An owner or operator who initiates a shipment of hazardous waste from a treatment, storage, or disposal facility shall comply with the generator standards established in Rule R315-262.

Note 1: The provisions of Section R315-262-34 are applicable to the on-site accumulation of hazardous waste by generators. Therefore, the provisions of Section R315-262-34 only apply to owners or operators who are shipping hazardous waste which they generated at that facility.

Note 2: A generator who treats, stores, or disposes of hazardous waste on-site shall comply with the applicable

standards and permit requirements set forth in Rules R315-264, 265, 266, 268, and 270.

- (i) Reserved.
- (j) Reserved.
- (k) Reserved.

(l) The laboratories owned by an eligible academic entity that chooses to be subject to the requirements of Sections R315-262-200 through R315-262-216 are not subject to, for purposes of Subsection R315-262-10(l), the terms "laboratory" and "eligible academic entity" shall have the meaning as defined in Section R315-262-200:

(1) The independent requirements of Section R315-262-11 or the regulations in Section R315-262-15 for large quantity generators and small quantity generators, except as provided in Sections R315-262-200 through R315-262-216, and

(2) The conditions of Section R315-262-14, for very small quantity generators, except as provided in Sections R315-262-200 through R315-262-216.

(m) Generators of lamps, as defined in Section R315-273-9, using a drum-top crusher, as defined in Section R315-273-9, shall meet the requirements of Subsection R315-273-13(d)(3), except for the registration requirement; and Subsections R315-273-13(d)(4) and (5).

Note: A generator who treats, stores, or disposes of hazardous waste on-site shall comply with the applicable standards and permit requirements set forth in Rules R315-264, R315-265, R315-266, R315-268, and R315-270.

R315-262-11. General -- Hazardous Waste Determination and Recordkeeping.

A person who generates a solid waste, as defined in Section R315-261-2, shall make an accurate determination as to whether that waste is a hazardous waste in order to ensure wastes are properly managed according to applicable regulations. A hazardous waste determination is made using the following steps:

(a) The hazardous waste determination for each solid waste shall be made at the point of waste generation, before any dilution, mixing, or other alteration of the waste occurs, and at any time in the course of its management that it has, or may have, changed its properties as a result of exposure to the environment or other factors that may change the properties of the waste such that the hazardous classification of the waste may change.

(b) A person shall determine whether the solid waste is excluded from regulation under Section R315-261-4.

(c) If the waste is not excluded under Section R315-261-4, the person shall then use knowledge of the waste to determine whether the waste meets any of the listing descriptions under Sections R315-261-30 through R315-261-35. Acceptable knowledge that may be used in making an accurate determination as to whether the waste is listed may include waste origin, composition, the process producing the waste, feedstock, and other reliable and relevant information. If the waste is listed, the person may file a delisting petition under Sections R315-260-20 and R315-260-22 to demonstrate to the Director that the waste from this particular site or operation is not a hazardous waste.

(d) The person then shall also determine whether the waste exhibits one or more hazardous characteristics as identified in Sections R315-261-20 through R315-261-24 by following the procedures in Subsections R315-262-11(d)(1) or (2), or a combination of both.

(1) The person shall apply knowledge of the hazard characteristic of the waste in light of the materials or the processes used to generate the waste. Acceptable knowledge may include process knowledge, for example, information about chemical feedstocks and other inputs to the production process; knowledge of products, by-products, and intermediates

produced by the manufacturing process; chemical or physical characterization of wastes; information on the chemical and physical properties of the chemicals used or produced by the process or otherwise contained in the waste; testing that illustrates the properties of the waste; or other reliable and relevant information about the properties of the waste or its constituents. A test other than a test method set forth in Sections R315-261-20 through R315-261-24, or an equivalent test method approved by the Director under Section R315-260-21, may be used as part of a person's knowledge to determine whether a solid waste exhibits a characteristic of hazardous waste. However, such tests do not, by themselves, provide definitive results. Persons testing their waste shall obtain a representative sample of the waste for the testing, as defined at Section R315-260-10.

(2) When available knowledge is inadequate to make an accurate determination, the person shall test the waste according to the applicable methods set forth in Sections R315-261-20 through R315-261-24 or according to an equivalent method approved by the Director under Section R315-260-21 and in accordance with the following:

(i) Persons testing their waste shall obtain a representative sample of the waste for the testing, as defined at Section R315-260-10.

(ii) Where a test method is specified in Sections R315-261-20 through R315-261-24, the results of the regulatory test, when properly performed, are definitive for determining the regulatory status of the waste.

(e) If the waste is determined to be hazardous, the generator shall refer to Rules R315-261, R315-264, R315-265, R315-266, R315-268, and R315-273 for other possible exclusions or restrictions pertaining to management of the specific waste.

(f) Recordkeeping for small and large quantity generators. A small or large quantity generator shall maintain records supporting its hazardous waste determinations, including records that identify whether a solid waste is a hazardous waste, as defined by Section R315-261-3. Records shall be maintained for at least three years from the date that the waste was last sent to on-site or off-site treatment, storage, or disposal. These records shall comprise the generator's knowledge of the waste and support the generator's determination, as described at Subsections R315-262-11(c) and (d). The records shall include, but are not limited to, the following types of information: The results of any tests, sampling, waste analyses, or other determinations made in accordance with this section; records documenting the tests, sampling, and analytical methods used to demonstrate the validity and relevance of such tests; records consulted in order to determine the process by which the waste was generated, the composition of the waste, and the properties of the waste; and records which explain the knowledge basis for the generator's determination, as described at Subsection R315-262-11(d)(1). The periods of record retention referred to in Subsection R315-262-11(2)(f) are extended automatically during the course of any unresolved enforcement action regarding the regulated activity or as requested by the Director.

(g) Identifying hazardous waste numbers for small and large quantity generators. If the waste is determined to be hazardous, small quantity generators and large quantity generators shall identify all applicable EPA hazardous waste numbers, EPA hazardous waste codes, in Sections R315-261-20 through R315-261-24 and R315-261-30 through R315-261-35. Prior to shipping the waste off site, the generator also shall mark its containers with all applicable EPA hazardous waste numbers, EPA hazardous waste codes, according to Section R315-262-32.

R315-262-13. General -- Generator Category Determination.

A generator shall determine its generator category. A

generator's category is based on the amount of hazardous waste generated each month and may change from month to month. This section sets forth procedures to determine whether a generator is a very small quantity generator, a small quantity generator, or a large quantity generator for a particular month, as defined in Section R315-260-10.

(a) Generators of either acute hazardous waste or non-acute hazardous waste. A generator who either generates acute hazardous waste or non-acute hazardous waste in a calendar month shall determine its generator category for that month by doing the following:

- (1) Counting the total amount of hazardous waste generated in the calendar month;
- (2) Subtracting from the total any amounts of waste exempt from counting as described in Subsections R315-262-13(c) and (d); and
- (3) Determining the resulting generator category for the hazardous waste generated using Table 1 below.

(b) Generators of both acute and non-acute hazardous wastes. A generator who generates both acute hazardous waste and non-acute hazardous waste in the same calendar month shall determine its generator category for that month by doing the following:

- (1) Counting separately the total amount of acute hazardous waste and the total amount of non-acute hazardous waste generated in the calendar month;
- (2) Subtracting from each total any amounts of waste exempt from counting as described in Subsections R315-262-13(c) and (d);
- (3) Determining separately the resulting generator categories for the quantities of acute and non-acute hazardous waste generated using Table 1 below; and
- (4) Comparing the resulting generator categories from Subsection R315-262-13(b)(3) and applying the more stringent generator category to the accumulation and management of both non-acute hazardous waste and acute hazardous waste generated for that month.

TABLE 1 to Section R315-262-13

Generator Categories Based on Quantity of Waste Generated in a Calendar Month			
Quantity of acute hazardous waste generated in a calendar month	Quantity of non-acute hazardous waste generated in a calendar month	Quantity of residues from a cleanup of acute hazardous waste generated in a calendar month	Generator category
>1kg	Any amount	Any amount	Large quantity generator
Any amount	> or = 1,000kg	Any amount	Large quantity generator
Any amount	Any Amount	>100kg	Large quantity generator
< or = 1 kg	>100 kg and < 1,000 kg	< or = 100 kg	Small quantity Generator
< or = 1 kg	< or = 100 kg	< or = 100 kg	Very small quantity generator

(c) When making the monthly quantity-based determinations required by Rule R315-262, the generator shall include all hazardous waste that it generates, except hazardous waste that:

- (1) Is exempt from regulation under Subsections R315-261-4(c) through (f), 261-6(a)(3), R315-261-7(a)(1), or Section R315-261-8;
- (2) Is managed immediately upon generation only in on-site elementary neutralization units, wastewater treatment units, or totally enclosed treatment facilities as defined in Section R315-260-10;

(3) Is recycled, without prior storage or accumulation, only in an on-site process subject to regulation under Subsection R315-261-6(c)(2);

(4) Is used oil managed under the requirements of Subsection R315-261-6(a)(4) and R315-15;

(5) Is spent lead-acid batteries managed under the requirements of Section R315-266-80;

(6) Is universal waste managed under Section R315-261-9 and Rule R315-273;

(7) Is a hazardous waste that is an unused commercial chemical product, listed in Sections R315-261-30 through R315-261-35 or exhibiting one or more characteristics in Sections R315-261-20 through R315-261-24, that is generated solely as a result of a laboratory clean-out conducted at an eligible academic entity pursuant to Section R315-262-213. For purposes of this provision, the term eligible academic entity shall have the meaning as defined in Section R315-262-200; or

(8) Is managed as part of an episodic event in compliance with the conditions of Sections R315-262-230 through R315-262-233.

(d) In determining the quantity of hazardous waste generated in a calendar month, a generator need not include:

- (1) Hazardous waste when it is removed from on-site accumulation, so long as the hazardous waste was previously counted once;
- (2) Hazardous waste generated by on-site treatment (including reclamation) of the generator's hazardous waste, so long as the hazardous waste that is treated was previously counted once; and
- (3) Hazardous waste spent materials that are generated, reclaimed, and subsequently reused on site, so long as such spent materials have been previously counted once.

(e) Based on the generator category as determined under Section R315-262-13, the generator shall meet the applicable independent requirements listed in Section R315-262-10. A generator's category also determines which of the provisions of Sections R315-262-14, R315-262-15, R315-262-16 or R315-262-17 shall be met to obtain an exemption from the storage facility permit, interim status, and operating requirements when accumulating hazardous waste.

(f) Mixing hazardous wastes with solid wastes
 (1) Very small quantity generator wastes.

(i) Hazardous wastes generated by a very small quantity generator may be mixed with solid wastes. Very small quantity generators may mix a portion or all of its hazardous waste with solid waste and remain subject to Section R315-262-14 even though the resultant mixture exceeds the quantity limits identified in the definition of very small quantity generator at Section R315-260-10, unless the mixture exhibits one or more of the characteristics of hazardous waste identified in Sections R315-261-20 through R315-261-24.

(ii) If the resulting mixture exhibits a characteristic of hazardous waste, this resultant mixture is a newly-generated hazardous waste. The very small quantity generator shall count both the resultant mixture amount plus the other hazardous waste generated in the calendar month to determine whether the total quantity exceeds the very small quantity generator calendar month quantity limits identified in the definition of generator categories found in Section R315-260-10. If so, to remain exempt from the permitting, interim status, and operating standards, the very small quantity generator shall meet the conditions for exemption applicable to either a small quantity generator or a large quantity generator. The very small quantity generator shall also comply with the applicable independent requirements for either a small quantity generator or a large quantity generator.

(iii) If a very small quantity generator's wastes are mixed with used oil, the mixture is subject to Rule R315-15. Any material produced from such a mixture by processing, blending,

or other treatment is also regulated under Rule R315-15.

(2) Small quantity generator and large quantity generator wastes.

(i) Hazardous wastes generated by a small quantity generator or large quantity generator may be mixed with solid waste. These mixtures are subject to the following: the mixture rule in Subsections R315-261-3(a)(2)(iv), (b)(2) and (3), and (g)(2)(i); the prohibition of dilution rule at Subsection R315-268-3(a); the land disposal restriction requirements of Section R315-268-40 if a characteristic hazardous waste is mixed with a solid waste so that it no longer exhibits the hazardous characteristic; and the hazardous waste determination requirement at Section R315-262-11.

(ii) If the resulting mixture is found to be a hazardous waste, this resultant mixture is a newly-generated hazardous waste. A small quantity generator shall count both the resultant mixture amount plus the other hazardous waste generated in the calendar month to determine whether the total quantity exceeds the small quantity generator calendar monthly quantity limits identified in the definition of generator categories found in Section R315-260-10. If so, to remain exempt from the permitting, interim status, and operating standards, the small quantity generator shall meet the conditions for exemption applicable to a large quantity generator. The small quantity generator shall also comply with the applicable independent requirements for a large quantity generator.

R315-262-14. General -- Conditions For Exemption for a Very Small Quantity Generator.

(a) Provided that the very small quantity generator meets all the conditions for exemption listed in Section R315-262-14, hazardous waste generated by the very small quantity generator is not subject to the requirements of Rules R315-124, 262 (except Sections R315-262-10 through R315-262-14) through R315-268, and R315-270, and the notification requirements of section 3010 of RCRA and the very small quantity generator may accumulate hazardous waste on site without complying with such requirements. The conditions for exemption are as follows:

(1) In a calendar month the very small quantity generator generates less than or equal to the amounts specified in the definition of "very small quantity generator" in Section R315-260-10;

(2) The very small quantity generator complies with Subsections R315-262-11(a) through (d);

(3) If the very small quantity generator accumulates at any time greater than 1 kilogram (2.2 lbs) of acute hazardous waste or 100 kilograms (220 lbs) of any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill, into or on any land or water, of any acute hazardous waste listed in Section R315-261-31 or Subsection R315-261-33(e), all quantities of that acute hazardous waste are subject to the following additional conditions for exemption:

(i) Such waste is held on site for no more than 90 days beginning on the date when the accumulated wastes exceed the amounts provided in Subsection R315-262-14(a)(3); and

(ii) The conditions for exemption in Subsections R315-262-17(a) through (g).

(4) If the very small quantity generator accumulates at any time 1,000 kilograms (2,200 lbs) or greater of non-acute hazardous waste, all quantities of that hazardous waste are subject to the following additional conditions for exemption:

(i) Such waste is held on site for no more than 180 days, or 270 days, if applicable, beginning on the date when the accumulated waste exceed the amounts provided in Subsection R315-262-14(a)(4);

(ii) The quantity of waste accumulated on site never exceeds 6,000 kilograms (13,200 lbs); and

(iii) The conditions for exemption in Subsections R315-

262-16(b)(2) through (f).

(5) A very small quantity generator that accumulates hazardous waste in amounts less than or equal to the limits in Subsections R315-262-14(a)(3) and (4) shall either treat or dispose of its hazardous waste in an on-site facility or ensure delivery to an off-site treatment, storage, or disposal facility, either of which, if located in the U.S., is:

(i) Permitted under Rule R315-270;

(ii) In interim status under Rules R315-265 and 270;

(iii) Authorized to manage hazardous waste by a state with a hazardous waste management program approved under 40 CFR 271;

(iv) Permitted, licensed, or registered by a state to manage municipal solid waste and, if managed in a municipal solid waste landfill is subject to Rules R315-301 through R315-320;

(v) Permitted, licensed, or registered by a state to manage non-municipal non-hazardous waste and, if managed in a non-municipal non-hazardous waste disposal unit, is subject to the requirements in Rules R315-301 through R315-320 or 40 CFR 257.5 through 257.30;

(vi) A facility which:

(A) Beneficially uses or reuses, or legitimately recycles or reclaims its waste; or

(B) Treats its waste prior to beneficial use or reuse, or legitimate recycling or reclamation;

(vii) For universal waste managed under Rule R315-273, a universal waste handler or destination facility subject to the requirements of Rule R315-273;

(viii) A large quantity generator under the control of the same person as the very small quantity generator, provided the following conditions are met:

(A) The very small quantity generator and the large quantity generator are under the control of the same person as defined in Section R315-260-10. "Control," for the purposes of Subsection R315-262-14(a)(5)(viii), means the power to direct the policies of the generator, whether by the ownership of stock, voting rights, or otherwise, except that contractors who operate generator facilities on behalf of a different person as defined in Section R315-260-10 shall not be deemed to "control" such generators.

(B) The very small quantity generator marks its container(s) of hazardous waste with:

(1) The words "Hazardous Waste" and

(2) An indication of the hazards of the contents, examples include, but are not limited to:

(I) the applicable hazardous waste characteristic(s), i.e., ignitable, corrosive, reactive, toxic;

(II) hazard communication consistent with the Department of Transportation requirements at 49 CFR part 172 subpart E, labeling, or subpart F, placarding;

(III) a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at 29 CFR 1910.1200; or

(IV) a chemical hazard label consistent with the National Fire Protection Association code 704.

(b) The placement of bulk or non-containerized liquid hazardous waste or hazardous waste containing free liquids (whether or not sorbents have been added) in any landfill is prohibited.

(c) A very small quantity generator experiencing an episodic event may generate and accumulate hazardous waste in accordance with Sections R315-262-230 through 233 in lieu of Sections R315-262-15, 16, and 17.

R315-262-15. General -- Satellite Accumulation Area Regulations for Small and Large Quantity Generators.

(a) A generator may accumulate as much as 55 gallons of non-acute hazardous waste and/or either one quart of liquid acute hazardous waste listed in Section R315-261-31 or

Subsection R315-261-33(e) or 1 kg (2.2 lbs) of solid acute hazardous waste listed in Section R315-261-31 or Subsection R315-261-33(e) in containers at or near any point of generation where wastes initially accumulate which is under the control of the operator of the process generating the waste, without a permit or interim status and without complying with the requirements of Rules R315-124, R315-264 through R315-266, and R315-270, provided that all of the conditions for exemption in Section R315-262-15 are met. A generator may comply with the conditions for exemption in Section R315-262-15 instead of complying with the conditions for exemption in Subsection R315-262-16(b) or 17(a), except as required in Subsections R315-262-15(a)(7) and (8). The conditions for exemption for satellite accumulation are:

(1) If a container holding hazardous waste is not in good condition, or if it begins to leak, the generator shall immediately transfer the hazardous waste from this container to a container that is in good condition and does not leak, or immediately transfer and manage the waste in a central accumulation area operated in compliance with Subsections R315-262-16(b) or 17(a).

(2) The generator shall use a container made of or lined with materials that will not react with, and are otherwise compatible with, the hazardous waste to be accumulated, so that the ability of the container to contain the waste is not impaired.

(3) Special standards for incompatible wastes.

(i) Incompatible wastes, or incompatible wastes and materials, (see appendix V of 40 CFR 265 for examples) shall not be placed in the same container, unless 40 CFR 265.17(b), which is incorporated by reference in Section R315-265-1, is complied with.

(ii) Hazardous waste shall not be placed in an unwashed container that previously held an incompatible waste or material (see appendix V of 40 CFR 265 for examples), unless 40 CFR 265.17(b), which is incorporated by reference in Section R315-265-1, is complied with.

(iii) A container holding a hazardous waste that is incompatible with any waste or other materials accumulated nearby in other containers shall be separated from the other materials or protected from them by any practical means.

(4) A container holding hazardous waste shall be closed at all times during accumulation, except:

(i) When adding, removing, or consolidating waste; or
(ii) When temporary venting of a container is necessary:

(A) For the proper operation of equipment, or

(B) To prevent dangerous situations, such as build-up of extreme pressure.

(5) A generator shall mark or label its container with the following:

(i) The words "Hazardous Waste" and

(ii) An indication of the hazards of the contents, examples include, but are not limited to:

(A) the applicable hazardous waste characteristic(s), i.e., ignitable, corrosive, reactive, toxic;

(B) hazard communication consistent with the Department of Transportation requirements at 49 CFR part 172 subpart E, labeling, or subpart F, placarding;

(C) a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at 29 CFR 1910.1200; or

(D) a chemical hazard label consistent with the National Fire Protection Association code 704.

(6) A generator who accumulates either acute hazardous waste listed in Section R315-261-31 or Subsection R315-261-33(e) or non-acute hazardous waste in excess of the amounts listed in Subsection R315-262-15(a) at or near any point of generation shall do the following:

(i) Comply within three consecutive calendar days with the applicable central accumulation area regulations in Subsection

R315-262-16(b) or 17(a), or

(ii) Remove the excess from the satellite accumulation area within three consecutive calendar days to either:

(A) A central accumulation area operated in accordance with the applicable regulations in Subsection R315-262-16(b) or 17(a);

(B) An on-site interim status or permitted treatment, storage, or disposal facility, or

(C) An off-site designated facility; and

(iii) During the three-consecutive-calendar-day period the generator shall continue to comply with Subsections R315-262-15(a)(1) through (5). The generator shall mark or label the container(s) holding the excess accumulation of hazardous waste with the date the excess amount began accumulating.

(7) All satellite accumulation areas operated by a small quantity generator shall meet the preparedness and prevention regulations of Subsection R315-262-16(b)(8) and emergency procedures at Subsection R315-262-16(b)(9).

(8) All satellite accumulation areas operated by a large quantity generator shall meet the Preparedness, Prevention and Emergency Procedures in Sections R315-262-250 through R315-262-265.

(b) Reserved.

R315-262-16. General -- Conditions for Exemption for a Small Quantity Generator that Accumulates Hazardous Waste.

A small quantity generator may accumulate hazardous waste on site without a permit or interim status, and without complying with the requirements of Rules R315-124, R315-264 through R315-266, and R315-270, or the notification requirements of section 3010 of RCRA, provided that all the conditions for exemption listed in Section R315-262-16 are met:

(a) Generation. The generator generates in a calendar month no more than the amounts specified in the definition of "small quantity generator" in Section R315-260-10.

(b) Accumulation. The generator accumulates hazardous waste on site for no more than 180 days, unless in compliance with the conditions for exemption for longer accumulation in Subsections R315-262-16(d) and (e). The following accumulation conditions also apply:

(1) Accumulation limit. The quantity of hazardous waste accumulated on site never exceeds 6,000 kilograms (13,200 pounds);

(2) Accumulation of hazardous waste in containers.

(i) Condition of containers. If a container holding hazardous waste is not in good condition, or if it begins to leak, the small quantity generator shall immediately transfer the hazardous waste from this container to a container that is in good condition, or immediately manage the waste in some other way that complies with the conditions for exemption of Section R315-262-16.

(ii) Compatibility of waste with container. The small quantity generator shall use a container made of or lined with materials that will not react with, and are otherwise compatible with, the hazardous waste to be accumulated, so that the ability of the container to contain the waste is not impaired.

(iii) Management of containers.

(A) A container holding hazardous waste shall always be closed during accumulation, except when it is necessary to add or remove waste.

(B) A container holding hazardous waste shall not be opened, handled, or accumulated in a manner that may rupture the container or cause it to leak.

(iv) Inspections. At least weekly, the small quantity generator shall inspect central accumulation areas. The small quantity generator shall look for leaking containers and for deterioration of containers caused by corrosion or other factors. See Subsection R315-262-16(b)(2)(i) for remedial action

required if deterioration or leaks are detected.

(v) Special conditions for accumulation of incompatible wastes.

(A) Incompatible wastes, or incompatible wastes and materials, (see appendix V of 40 CFR 265 for examples) shall not be placed in the same container, unless 40 CFR 265.17(b), which is incorporated by reference in Section R315-265-1, is complied with.

(B) Hazardous waste shall not be placed in an unwashed container that previously held an incompatible waste or material (see appendix V of 40 CFR 265 for examples), unless 40 CFR 265.17(b), which is incorporated by reference in Section R315-265-1, is complied with.

(C) A container accumulating hazardous waste that is incompatible with any waste or other materials accumulated or stored nearby in other containers, piles, open tanks, or surface impoundments shall be separated from the other materials or protected from them by means of a dike, berm, wall, or other device.

(3) Accumulation of hazardous waste in tanks.

(i) Reserved.

(ii) A small quantity generator of hazardous waste shall comply with the following general operating conditions:

(A) Treatment or accumulation of hazardous waste in tanks shall comply with 40 CFR 265.17(b), which is incorporated by reference in Section R315-265-1.

(B) Hazardous wastes or treatment reagents shall not be placed in a tank if they could cause the tank or its inner liner to rupture, leak, corrode, or otherwise fail before the end of its intended life.

(C) Uncovered tanks shall be operated to ensure at least 60 centimeters (2 feet) of freeboard, unless the tank is equipped with a containment structure (e.g., dike or trench), a drainage control system, or a diversion structure (e.g., standby tank) with a capacity that equals or exceeds the volume of the top 60 centimeters (2 feet) of the tank.

(D) Where hazardous waste is continuously fed into a tank, the tank shall be equipped with a means to stop this inflow (e.g., waste feed cutoff system or by-pass system to a stand-by tank).

(iii) Except as noted in Subsection R315-262-16(b)(3)(iv), a small quantity generator that accumulates hazardous waste in tanks shall inspect, where present:

(A) Discharge control equipment (e.g., waste feed cutoff systems, by-pass systems, and drainage systems) at least once each operating day, to ensure that it is in good working order;

(B) Data gathered from monitoring equipment (e.g., pressure and temperature gauges) at least once each operating day to ensure that the tank is being operated according to its design;

(C) The level of waste in the tank at least once each operating day to ensure compliance with Subsection R315-262-16(b)(3)(ii)(C);

(D) The construction materials of the tank at least weekly to detect corrosion or leaking of fixtures or seams; and

(E) The construction materials of, and the area immediately surrounding, discharge confinement structures (e.g., dikes) at least weekly to detect erosion or obvious signs of leakage (e.g., wet spots or dead vegetation). The generator shall remedy any deterioration or malfunction of equipment or structures which the inspection reveals on a schedule which ensures that the problem does not lead to an environmental or human health hazard. Where a hazard is imminent or has already occurred, remedial action shall be taken immediately.

(iv) A small quantity generator accumulating hazardous waste in tanks or tank systems that have full secondary containment and that either use leak detection equipment to alert personnel to leaks, or implement established workplace practices to ensure leaks are promptly identified, shall inspect at least weekly, where applicable, the areas identified in Subsections

R315-262-16(b)(3)(iii)(A) through (E). Use of the alternate inspection schedule shall be documented in the generator's operating record. This documentation shall include a description of the established workplace practices at the generator.

(v) Reserved.

(vi) A small quantity generator accumulating hazardous waste in tanks shall, upon closure of the facility, remove all hazardous waste from tanks, discharge control equipment, and discharge confinement structures. At closure, as throughout the operating period, unless the small quantity generator can demonstrate, in accordance with Subsection R315-261-3(c) or (d), that any solid waste removed from its tank is not a hazardous waste, then it shall manage such waste in accordance with all applicable provisions of Rules R315-262, R315-263, R315-265, and R315-268.

(vii) A small quantity generator shall comply with the following special conditions for accumulation of ignitable or reactive waste:

(A) Ignitable or reactive waste shall not be placed in a tank, unless:

(I) The waste is treated, rendered, or mixed before or immediately after placement in a tank so that the resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive waste under Section R315-261-21 or R315-261-23 and 40 CFR 265.17(b), which is incorporated by reference in Section R315-265-1, is complied with; or

(II) The waste is accumulated or treated in such a way that it is protected from any material or conditions that may cause the waste to ignite or react; or

(III) The tank is used solely for emergencies.

(B) A small quantity generator which treats or accumulates ignitable or reactive waste in covered tanks shall comply with the buffer zone requirements for tanks contained in Tables 2-1 through 2-6 of the National Fire Protection Association's "Flammable and Combustible Liquids Code" (1977 or 1981), incorporated by reference, see Section R315-260-11.

(C) A small quantity generator shall comply with the following special conditions for incompatible wastes:

(I) Incompatible wastes, or incompatible wastes and materials, (see 40 CFR 265 appendix V for examples) shall not be placed in the same tank, unless 40 CFR 265.17(b), which is incorporated by reference in Section R315-265-1, is complied with.

(II) Hazardous waste shall not be placed in an unwashed tank that previously held an incompatible waste or material, unless 40 CFR 265.17(b), which is incorporated by reference in Section R315-265-1, is complied with.

(4) Accumulation of hazardous waste on drip pads. If the waste is placed on drip pads, the small quantity generator shall comply with the following:

(i) 40 CFR 265.440 through 265.445, which is incorporated by reference in Section R315-265-1, except 265.445(c);

(ii) The small quantity generator shall remove all wastes from the drip pad at least once every 90 days. Any hazardous wastes that are removed from the drip pad at least once every 90 days are then subject to the 180-day accumulation limit in Subsections R315-262-16(b) and Section R315-262-15 if hazardous wastes are being managed in satellite accumulation areas prior to being moved to the central accumulation area; and

(iii) The small quantity generator shall maintain on site at the facility the following records readily available for inspection:

(A) A written description of procedures that are followed to ensure that all wastes are removed from the drip pad and associated collection system at least once every 90 days; and

(B) Documentation of each waste removal, including the

quantity of waste removed from the drip pad and the sump or collection system and the date and time of removal.

(5) Accumulation of hazardous waste in containment buildings. If the waste is placed in containment buildings, the small quantity generator shall comply with 40 CFR 265.1100 through 265.1102, which is incorporated by reference in Section R315-265-1. The generator shall label its containment buildings with the words "Hazardous Waste" in a conspicuous place easily visible to employees, visitors, emergency responders, waste handlers, or other persons on site and also in a conspicuous place provide an indication of the hazards of the contents, examples include, but are not limited to, the applicable hazardous waste characteristic(s), i.e., ignitable, corrosive, reactive, toxic; hazard communication consistent with the Department of Transportation requirements at 49 CFR part 172 subpart E, labeling, or subpart F, placarding; a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at 29 CFR 1910.1200; or a chemical hazard label consistent with the National Fire Protection Association code 704. The generator shall also maintain:

(i) The professional engineer certification that the building complies with the design standards specified in 40 CFR 265.1101, which is incorporated by reference in Section R315-265-1. This certification shall be in the generator's files prior to operation of the unit; and

(ii) The following records by use of inventory logs, monitoring equipment, or any other effective means:

(A) A written description of procedures to ensure that each waste volume remains in the unit for no more than 90 days, a written description of the waste generation and management practices for the facility showing that the generator is consistent with maintaining the 90 day limit, and documentation that the procedures are complied with; or

(B) Documentation that the unit is emptied at least once every 90 days.

(C) Inventory logs or records with the above information shall be maintained on site and readily available for inspection.

(6) Labeling and marking of containers and tanks.

(i) Containers. A small quantity generator shall mark or label its containers with the following:

(A) The words "Hazardous Waste";

(B) An indication of the hazards of the contents, examples include, but are not limited to:

(I) the applicable hazardous waste characteristic(s), i.e., ignitable, corrosive, reactive, toxic;

(II) hazard communication consistent with the Department of Transportation requirements at 49 CFR part 172 subpart E, labeling, or subpart F, placarding;

(III) a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at 29 CFR 1910.1200; or

(IV) a chemical hazard label consistent with the National Fire Protection Association code 704; and

(C) The date upon which each period of accumulation begins clearly visible for inspection on each container.

(ii) Tanks. A small quantity generator accumulating hazardous waste in tanks shall do the following:

(A) Mark or label its tanks with the words "Hazardous Waste";

(B) Mark or label its tanks with an indication of the hazards of the contents, examples include, but are not limited to:

(I) the applicable hazardous waste characteristic(s), i.e., ignitable, corrosive, reactive, toxic;

(II) hazard communication consistent with the Department of Transportation requirements at 49 CFR part 172 subpart E, labeling, or subpart F, placarding;

(III) a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard

Communication Standard at 29 CFR 1910.1200; or

(IV) a chemical hazard label consistent with the National Fire Protection Association code 704;

(C) Use inventory logs, monitoring equipment, or other records to demonstrate that hazardous waste has been emptied within 180 days of first entering the tank if using a batch process, or in the case of a tank with a continuous flow process, demonstrate that estimated volumes of hazardous waste entering the tank daily exit the tank within 180 days of first entering; and

(D) Keep inventory logs or records with the above information on site and readily available for inspection.

(7) Land disposal restrictions. A small quantity generator shall comply with all the applicable requirements under Rule R315-268.

(8) Preparedness and prevention.

(i) Maintenance and operation of facility. A small quantity generator shall maintain and operate its facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.

(ii) Required equipment. All areas where hazardous waste is either generated or accumulated shall be equipped with the items in Subsections R315-262-16(b)(8)(ii)(A) through (D), unless none of the hazards posed by waste handled at the facility could require a particular kind of equipment specified below or the actual waste generation or accumulation area does not lend itself for safety reasons to have a particular kind of equipment specified below. A small quantity generator may determine the most appropriate locations to locate equipment necessary to prepare for and respond to emergencies.

(A) An internal communications or alarm system capable of providing immediate emergency instruction, voice or signal, to facility personnel;

(B) A device, such as a telephone, immediately available at the scene of operations, or a hand-held two-way radio, capable of summoning emergency assistance from local police departments, fire departments, or State or local emergency response teams;

(C) Portable fire extinguishers, fire control equipment, including special extinguishing equipment, such as that using foam, inert gas, or dry chemicals, spill control equipment, and decontamination equipment; and

(D) Water at adequate volume and pressure to supply water hose streams, or foam producing equipment, or automatic sprinklers, or water spray systems.

(iii) Testing and maintenance of equipment. All communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, where required, shall be tested and maintained as necessary to assure its proper operation in time of emergency.

(iv) Access to communications or alarm system.

(A) Whenever hazardous waste is being poured, mixed, spread, or otherwise handled, all personnel involved in the operation shall have immediate access, e.g., direct or unimpeded access, to an internal alarm or emergency communication device, either directly or through visual or voice contact with another employee, unless such a device is not required under Subsection R315-262-16(a)(8)(ii).

(B) In the event there is just one employee on the premises while the facility is operating, the employee shall have immediate access, e.g., direct or unimpeded access, to a device, such as a telephone, immediately available at the scene of operation, or a hand-held two-way radio, capable of summoning external emergency assistance, unless such a device is not required under Subsection R315-262-16(a)(8)(ii).

(v) Required aisle space. The small quantity generator shall maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment,

and decontamination equipment to any area of facility operation in an emergency, unless aisle space is not needed for any of these purposes.

(vi) Arrangements with local authorities.

(A) The small quantity generator shall attempt to make arrangements with the local police department, fire department, other emergency response teams, emergency response contractors, equipment suppliers and local hospitals, taking into account the types and quantities of hazardous wastes handled at the facility. Arrangements may be made with the Local Emergency Planning Committee, if it is determined to be the appropriate organization with which to make arrangements.

(I) A small quantity generator attempting to make arrangements with its local fire department shall determine the potential need for the services of the local police department, other emergency response teams, emergency response contractors, equipment suppliers and local hospitals.

(II) As part of this coordination, the small quantity generator shall attempt to make arrangements, as necessary, to familiarize the above organizations with the layout of the facility, the properties of hazardous waste handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to roads inside the facility, and possible evacuation routes as well as the types of injuries or illnesses that could result from fires, explosions, or releases at the facility.

(III) Where more than one police or fire department might respond to an emergency, the small quantity generator shall attempt to make arrangements designating primary emergency authority to a specific fire or police department, and arrangements with any others to provide support to the primary emergency authority.

(B) A small quantity generator shall maintain records documenting the arrangements with the local fire department as well as any other organization necessary to respond to an emergency. This documentation shall include documentation in the operating record that either confirms such arrangements actively exist or, in cases where no arrangements exist, confirms that attempts to make such arrangements were made.

(C) A facility possessing 24-hour response capabilities may seek a waiver from the authority having jurisdiction (AHJ) over the fire code within the facility's state or locality as far as needing to make arrangements with the local fire department as well as any other organization necessary to respond to an emergency, provided that the waiver is documented in the operating record.

(9) Emergency procedures. The small quantity generator complies with the following conditions for those areas of the generator facility where hazardous waste is generated and accumulated:

(i) At all times there shall be at least one employee either on the premises or on call, i.e., available to respond to an emergency by reaching the facility within a short period of time, with the responsibility for coordinating all emergency response measures specified in Subsection R315-262-16(b)(9)(iv). This employee is the emergency coordinator.

(ii) The small quantity generator shall post the following information next to telephones or in areas directly involved in the generation and accumulation of hazardous waste:

(A) The name and emergency telephone number of the emergency coordinator;

(B) Location of fire extinguishers and spill control material, and, if present, fire alarm; and

(C) The telephone number of the fire department, unless the facility has a direct alarm.

(iii) The small quantity generator shall ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures, relevant to their responsibilities during normal facility operations and emergencies;

(iv) The emergency coordinator or his designee shall respond to any emergencies that arise. The applicable responses are as follows:

(A) In the event of a fire, call the fire department or attempt to extinguish it using a fire extinguisher;

(B) In the event of a spill, the small quantity generator is responsible for containing the flow of hazardous waste to the extent possible, and as soon as is practicable, cleaning up the hazardous waste and any contaminated materials or soil. Such containment and cleanup can be conducted either by the small quantity generator or by a contractor on behalf of the small quantity generator;

(C) In the event of a fire, explosion, or other release that could threaten human health outside the facility or when the small quantity generator has knowledge that a spill has reached surface water, the small quantity generator shall immediately notify the National Response Center, using their 24-hour toll free number 800/424-8802 and the state environmental incident reporting program at 801/536-0200 or after hours at 801/536-4123. The report shall include the following information:

(I) The name, address, and U.S. EPA identification number of the small quantity generator;

(II) Date, time, and type of incident, e.g., spill or fire;

(III) Quantity and type of hazardous waste involved in the incident;

(IV) Extent of injuries, if any; and

(V) Estimated quantity and disposition of recovered materials, if any.

(c) Transporting over 200 miles. A small quantity generator who shall transport its waste, or offer its waste for transportation, over a distance of 200 miles or more for off-site treatment, storage or disposal may accumulate hazardous waste on site for 270 days or less without a permit or without having interim status provided that the generator complies with the conditions of Subsection R315-262-16(b).

(d) Accumulation time limit extension. A small quantity generator who accumulates hazardous waste for more than 180 days (or for more than 270 days if it shall transport its waste, or offer its waste for transportation, over a distance of 200 miles or more) is subject to the requirements of Rules R315-264, R315-265, R315-268, and R315-270 unless it has been granted an extension to the 180-day (or 270-day if applicable) period. Such extension may be granted by the Director if hazardous wastes shall remain on site for longer than 180 days (or 270 days if applicable) due to unforeseen, temporary, and uncontrollable circumstances. An extension of up to 30 days may be granted at the discretion of the Director on a case-by-case basis.

(e) Rejected load. A small quantity generator who sends a shipment of hazardous waste to a designated facility with the understanding that the designated facility can accept and manage the waste and later receives that shipment back as a rejected load or residue in accordance with the manifest discrepancy provisions of Section R315-264-72 or 40 CFR 265.72, which is incorporated by reference in R315-265-1, may accumulate the returned waste on site in accordance with Subsections R315-262-16(a)-(d). Upon receipt of the returned shipment, the generator shall:

(1) Sign Item 18c of the manifest, if the transporter returned the shipment using the original manifest; or

(2) Sign Item 20 of the manifest, if the transporter returned the shipment using a new manifest.

(f) A small quantity generator experiencing an episodic event may accumulate hazardous waste in accordance with Sections R315-262-230 through R315-262-233 in lieu of Section R315-262-17.

R315-262-17. General -- Conditions for Exemption for a Large Quantity Generator that Accumulates Hazardous Waste.

A large quantity generator may accumulate hazardous waste on site without a permit or interim status, and without complying with the requirements of Rules R315-124, R315-264 through R315-266, and R315-270, or the notification requirements of section 3010 of RCRA, provided that all of the following conditions for exemption are met:

(a) Accumulation. A large quantity generator accumulates hazardous waste on site for no more than 90 days, unless in compliance with the accumulation time limit extension or F006 accumulation conditions for exemption in Subsections R315-262-17(b) through (e). The following accumulation conditions also apply:

(1) Accumulation of hazardous waste in containers. If the hazardous waste is placed in containers, the large quantity generator shall comply with the following:

(i) Air emission standards. The applicable requirements of 40 CFR 265.1030 through 265.1035, 265.1050 through 265.1064, and 265.1080 through 265.1090, which are incorporated by reference in Section R315-265-1;

(ii) Condition of containers. If a container holding hazardous waste is not in good condition, or if it begins to leak, the large quantity generator shall immediately transfer the hazardous waste from this container to a container that is in good condition, or immediately manage the waste in some other way that complies with the conditions for exemption of this section;

(iii) Compatibility of waste with container. The large quantity generator shall use a container made of or lined with materials that will not react with, and are otherwise compatible with, the hazardous waste to be stored, so that the ability of the container to contain the waste is not impaired;

(iv) Management of containers.

(A) A container holding hazardous waste shall always be closed during accumulation, except when it is necessary to add or remove waste.

(B) A container holding hazardous waste shall not be opened, handled, or stored in a manner that may rupture the container or cause it to leak.

(v) Inspections. At least weekly, the large quantity generator shall inspect central accumulation areas. The large quantity generator shall look for leaking containers and for deterioration of containers caused by corrosion or other factors. See Subsection R315-262-17(a)(1)(ii) for remedial action required if deterioration or leaks are detected.

(vi) Special conditions for accumulation of ignitable and reactive wastes.

(A) Containers holding ignitable or reactive waste shall be located at least 15 meters (50 feet) from the facility's property line unless a written approval is obtained from the authority having jurisdiction over the local fire code allowing hazardous waste accumulation to occur within this restricted area. A record of the written approval shall be maintained as long as ignitable or reactive hazardous waste is accumulated in this area.

(B) The large quantity generator shall take precautions to prevent accidental ignition or reaction of ignitable or reactive waste. This waste shall be separated and protected from sources of ignition or reaction including but not limited to the following: Open flames, smoking, cutting and welding, hot surfaces, frictional heat, sparks (static, electrical, or mechanical), spontaneous ignition, e.g., from heat-producing chemical reactions, and radiant heat. While ignitable or reactive waste is being handled, the large quantity generator shall confine smoking and open flame to specially designated locations. "No Smoking" signs shall be conspicuously placed wherever there is a hazard from ignitable or reactive waste.

(vii) Special conditions for accumulation of incompatible wastes.

(A) Incompatible wastes, or incompatible wastes and materials, see appendix V of 40 CFR 265 for examples, shall not

be placed in the same container, unless 40 CFR 265.17(b), which is incorporated by reference in Section R315-265-1, is complied with.

(B) Hazardous waste shall not be placed in an unwashed container that previously held an incompatible waste or material, see appendix V of 40 CFR 265 for examples, unless 40 CFR 265.17(b), which is incorporated by reference in Section R315-265-1, is complied with.

(C) A container holding a hazardous waste that is incompatible with any waste or other materials accumulated or stored nearby in other containers, piles, open tanks, or surface impoundments shall be separated from the other materials or protected from them by means of a dike, berm, wall, or other device.

(2) Accumulation of hazardous waste in tanks. If the waste is placed in tanks, the large quantity generator shall comply with the applicable requirements of 40 CFR 265.109 through 265.202, except 265.197(c) of Closure and post-closure care and 265.200, Waste analysis and trial tests, as well as the applicable requirements of 265.1030 through 265.1035, 265.1050 through 265.1064, and 265.1080 through 265.1090, which are incorporated by reference in Section R315-265-1.

(3) Accumulation of hazardous waste on drip pads. If the hazardous waste is placed on drip pads, the large quantity generator shall comply with the following:

(i) 40 CFR 265.440 through 265.445, which are incorporated by reference in Section R315-265-1;

(ii) The large quantity generator shall remove all wastes from the drip pad at least once every 90 days. Any hazardous wastes that are removed from the drip pad are then subject to the 90-day accumulation limit in Subsection R315-262-17(a) and Section R315-262-15, if the hazardous wastes are being managed in satellite accumulation areas prior to being moved to a central accumulation area; and

(iii) The large quantity generator shall maintain on site at the facility the following records readily available for inspection:

(A) A written description of procedures that are followed to ensure that all wastes are removed from the drip pad and associated collection system at least once every 90 days; and

(B) Documentation of each waste removal, including the quantity of waste removed from the drip pad and the sump or collection system and the date and time of removal.

(4) Accumulation of hazardous waste in containment buildings. If the waste is placed in containment buildings, the large quantity generator shall comply with 40 CFR 265.1100 through 265.1102, which are incorporated by reference in Section R315-265-1. The generator shall label its containment building with the words "Hazardous Waste" in a conspicuous place easily visible to employees, visitors, emergency responders, waste handlers, or other persons on site, and also in a conspicuous place provide an indication of the hazards of the contents, examples include, but are not limited to, the applicable hazardous waste characteristic(s), i.e., ignitable, corrosive, reactive, toxic; hazard communication consistent with the Department of Transportation requirements at 49 CFR part 172 subpart E, labeling, or subpart F, placarding; a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at 29 CFR 1910.1200; or a chemical hazard label consistent with the National Fire Protection Association code 704. The generator shall also maintain:

(i) The professional engineer certification that the building complies with the design standards specified in 40 CFR 265.1101, which is incorporated by reference in Section R315-265-1. This certification shall be in the generator's files prior to operation of the unit; and

(ii) The following records by use of inventory logs, monitoring equipment, or any other effective means:

(A) A written description of procedures to ensure that each waste volume remains in the unit for no more than 90 days, a written description of the waste generation and management practices for the facility showing that the generator is consistent with respecting the 90 day limit, and documentation that the procedures are complied with; or

(B) Documentation that the unit is emptied at least once every 90 days.

(C) Inventory logs or records with the above information shall be maintained on site and readily available for inspection.

(5) Labeling and marking of containers and tanks.

(i) Containers. A large quantity generator shall mark or label its containers with the following:

(A) The words "Hazardous Waste";

(B) An indication of the hazards of the contents, examples include, but are not limited to:

(I) the applicable hazardous waste characteristic(s), i.e., ignitable, corrosive, reactive, toxic;

(II) hazard communication consistent with the Department of Transportation requirements at 49 CFR part 172 subpart E, labeling, or subpart F, placarding;

(III) a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at 29 CFR 1910.1200; or

(IV) a chemical hazard label consistent with the National Fire Protection Association code 704; and

(C) The date upon which each period of accumulation begins clearly visible for inspection on each container.

(ii) Tanks. A large quantity generator accumulating hazardous waste in tanks shall do the following:

(A) Mark or label its tanks with the words "Hazardous Waste";

(B) Mark or label its tanks with an indication of the hazards of the contents, examples include, but are not limited to:

(I) the applicable hazardous waste characteristic(s), i.e., ignitable, corrosive, reactive, toxic;

(II) hazard communication consistent with the Department of Transportation requirements at 49 CFR part 172 subpart E, labeling, or subpart F, placarding;

(III) a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at 29 CFR 1910.1200; or

(IV) a chemical hazard label consistent with the National Fire Protection Association code 704;

(C) Use inventory logs, monitoring equipment or other records to demonstrate that hazardous waste has been emptied within 90 days of first entering the tank if using a batch process, or in the case of a tank with a continuous flow process, demonstrate that estimated volumes of hazardous waste entering the tank daily exit the tank within 90 days of first entering; and

(D) Keep inventory logs or records with the above information on site and readily available for inspection.

(6) Emergency procedures. The large quantity generator complies with the standards in Section R315-262-250 through R315-262-265, Preparedness, Prevention and Emergency Procedures for Large Quantity Generators.

(7) Personnel training.

(i)(A) Facility personnel shall successfully complete a program of classroom instruction, online training, e.g., computer-based or electronic, or on-the-job training that teaches them to perform their duties in a way that ensures compliance with this part. The large quantity generator shall ensure that this program includes all the elements described in the document required under Subsection R315-262-17(a)(7)(iv).

(B) This program shall be directed by a person trained in hazardous waste management procedures, and shall include instruction which teaches facility personnel hazardous waste management procedures, including contingency plan implementation, relevant to the positions in which they are

employed.

(C) At a minimum, the training program shall be designed to ensure that facility personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment, and emergency systems, including where applicable:

(I) Procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment;

(II) Key parameters for automatic waste feed cut-off systems;

(III) Communications or alarm systems;

(IV) Response to fires or explosions;

(V) Response to ground-water contamination incidents; and

(VI) Shutdown of operations.

(D) For facility employees that receive emergency response training pursuant to Occupational Safety and Health Administration regulations 29 CFR 1910.120(p)(8) and 1910.120(q), the large quantity generator is not required to provide separate emergency response training pursuant to Section R315-262-17, provided that the overall facility training meets all the conditions of exemption in Section R315-262-17.

(ii) Facility personnel shall successfully complete the program required in Subsection R315-262-17(a)(7)(i) within six months after the date of their employment or assignment to the facility, or to a new position at the facility, whichever is later. Employees shall not work in unsupervised positions until they have completed the training standards of Subsection R315-262-17(a)(7)(i).

(iii) Facility personnel shall take part in an annual review of the initial training required in Subsection R315-262-17(a)(7)(i).

(iv) The large quantity generator shall maintain the following documents and records at the facility:

(A) The job title for each position at the facility related to hazardous waste management, and the name of the employee filling each job;

(B) A written job description for each position listed under Subsection R315-262-17(a)(7)(iv)(A). This description may be consistent in its degree of specificity with descriptions for other similar positions in the same company location or bargaining unit, but shall include the requisite skill, education, or other qualifications, and duties of facility personnel assigned to each position;

(C) A written description of the type and amount of both introductory and continuing training that will be given to each person filling a position listed under Subsection R315-262-17(a)(7)(iv)(A);

(D) Records that document that the training or job experience, required under Subsections R315-262-17(a)(7)(i), (ii), and (iii), has been given to, and completed by, facility personnel.

(v) Training records on current personnel shall be kept until closure of the facility. Training records on former employees shall be kept for at least three years from the date the employee last worked at the facility. Personnel training records may accompany personnel transferred within the same company.

(8) Closure. A large quantity generator accumulating hazardous wastes in containers, tanks, drip pads, and containment buildings, prior to closing a unit at the facility, or prior to closing the facility, shall meet the following conditions:

(i) Notification for closure of a waste accumulation unit. A large quantity generator shall perform one of the following when closing a waste accumulation unit:

(A) Place a notice in the operating record within 30 days after closure identifying the location of the unit within the facility; or

(B) Meet the closure performance standards of Subsection R315-262-17(a)(8)(iii) for container, tank, and containment

building waste accumulation units or Subsection R315-262-17(a)(8)(iv) for drip pads and notify the Director following the procedures in Subsection R315-262-17(a)(8)(ii)(B) for the waste accumulation unit. If the waste accumulation unit is subsequently reopened, the generator may remove the notice from the operating record.

(ii) Notification for closure of the facility.

(A) Notify the Director using EPA form 8700-12 no later than 30 days prior to closing the facility.

(B) Notify EPA using EPA form 8700-12 within 90 days after closing the facility that it has complied with the closure performance standards of Subsection R315-262-17(a)(8)(iii) or (iv). If the facility cannot meet the closure performance standards of Subsection R315-262-17(a)(8)(iii) or (iv), notify the Director using EPA form 8700-12 that it will close as a landfill under 40 CFR 265.310, which is incorporated by reference in Section R315-265-1, in the case of a container, tank or containment building unit(s), or for a facility with drip pads, notify using EPA form 8700-12 that it will close under the standards of 40 CFR 265.445(b), which is incorporated by reference in Section R315-265-1.

(C) A large quantity generator may request additional time to clean close, but it shall notify the Director using EPA form 8700-12 within 75 days after the date provided in Subsection R315-262-17(a)(8)(ii)(A) to request an extension and provide an explanation as to why the additional time is required.

(iii) Closure performance standards for container, tank systems, and containment building waste accumulation units.

(A) At closure, the generator shall close the waste accumulation unit or facility in a manner that:

(I) Minimizes the need for further maintenance by controlling, minimizing, or eliminating, to the extent necessary to protect human health and the environment, the post-closure escape of hazardous waste, hazardous constituents, leachate, contaminated run-off, or hazardous waste decomposition products to the ground or surface waters or to the atmosphere,

(II) Removes or decontaminates all contaminated equipment, structures and soil and any remaining hazardous waste residues from waste accumulation units including containment system components (pads, liners, etc.), contaminated soils and subsoils, bases, and structures and equipment contaminated with waste, unless Subsection R315-261-3(d) applies.

(III) Any hazardous waste generated in the process of closing either the generator's facility or unit(s) accumulating hazardous waste shall be managed in accordance with all applicable standards of Rules R315-262, R315-263, R315-265 and R315-268, including removing any hazardous waste contained in these units within 90 days of generating it and managing these wastes in a hazardous waste permitted treatment, storage and disposal facility or interim status facility.

(IV) If the generator demonstrates that any contaminated soils and wastes cannot be practicably removed or decontaminated as required in Subsection R315-262-17(a)(8)(ii)(A)(II), then the waste accumulation unit is considered to be a landfill and the generator shall close the waste accumulation unit and perform post-closure care in accordance with the closure and post-closure care requirements that apply to landfills (40 CFR 265.310, which is incorporated by reference in Section R315-265-1). In addition, for the purposes of closure, post-closure, and financial responsibility, such a waste accumulation unit is then considered to be a landfill, and the generator shall meet all of the requirements for landfills specified in 40 CFR 265.110 through 265.121 and 265.140 through 265.148, which are incorporated by reference in Section R315-265-1.

(iv) Closure performance standards for drip pad waste accumulation units. At closure, the generator shall comply with the closure requirements of Subsections R315-262-17(a)(8)(ii)

and (a)(8)(iii)(A)(I) and (III), and 40 CFR 265.445(a) and (b), which are incorporated by reference in Section R315-265-1.

(v) The closure requirements of Subsection R315-262-17(a)(8) do not apply to satellite accumulation areas.

(9) Land disposal restrictions. The large quantity generator complies with all applicable requirements under Rule R315-268.

(b) Accumulation time limit extension. A large quantity generator who accumulates hazardous waste for more than 90 days is subject to the requirements of Rules R315-124, R315-264 through R315-266, R315-268, and R315-270 and the notification requirements of section 3010 of RCRA, unless it has been granted an extension to the 90-day period. Such extension may be granted by the Director if hazardous wastes shall remain on site for longer than 90 days due to unforeseen, temporary, and uncontrollable circumstances. An extension of up to 30 days may be granted at the discretion of the Director on a case-by-case basis.

(c) Accumulation of F006. A large quantity generator who also generates wastewater treatment sludges from electroplating operations that meet the listing description for the EPA hazardous waste number F006, may accumulate F006 waste on site for more than 90 days, but not more than 180 days without being subject to Rules R315-124, R315-264 through R315-266 and R315-270, and the notification requirements of section 3010 of RCRA, provided that it complies with all of the following additional conditions for exemption:

(1) The large quantity generator has implemented pollution prevention practices that reduce the amount of any hazardous substances, pollutants, or contaminants entering F006 or otherwise released to the environment prior to its recycling;

(2) The F006 waste is legitimately recycled through metals recovery;

(3) No more than 20,000 kilograms of F006 waste is accumulated on site at any one time; and

(4) The F006 waste is managed in accordance with the following:

(i)(A) If the F006 waste is placed in containers, the large quantity generator shall comply with the applicable conditions for exemption in Subsection R315-262-17(a)(1); and/or

(B) If the F006 is placed in tanks, the large quantity generator shall comply with the applicable conditions for exemption of Subsection R315-262-17(a)(2); and/or

(C) If the F006 is placed in containment buildings, the large quantity generator shall comply with 40 CFR 265.1100 through 265.1102, which are incorporated by reference in Section R315-265-1, and has placed its professional engineer certification that the building complies with the design standards specified in 40 CFR 265.1101, which is incorporated by reference in Section R315-265-1, in the facility's files prior to operation of the unit. The large quantity generator shall maintain the following records:

(I) A written description of procedures to ensure that the F006 waste remains in the unit for no more than 180 days, a written description of the waste generation and management practices for the facility showing that they are consistent with the 180-day limit, and documentation that the large quantity generator is complying with the procedures; or

(II) Documentation that the unit is emptied at least once every 180 days.

(ii) The large quantity generator is exempt from all the requirements in 40 CFR 265.110 through 265.121 and 265.140 through 265.148, which are incorporated by reference in Section R315-265-1, except for those referenced in Subsection R315-262-17(a)(8).

(iii) The date upon which each period of accumulation begins is clearly marked and shall be clearly visible for inspection on each container;

(iv) While being accumulated on site, each container and

tank is labeled or marked clearly with:

(A) The words "Hazardous Waste"; and
 (B) An indication of the hazards of the contents, examples include, but are not limited to:

(I) the applicable hazardous waste characteristic(s), i.e., ignitable, corrosive, reactive, toxic;

(II) hazard communication consistent with the Department of Transportation requirements at 49 CFR part 172 subpart E, labeling, or subpart F, placarding;

(III) a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at 29 CFR 1910.1200; or

(IV) a chemical hazard label consistent with the National Fire Protection Association code 704.

(v) The large quantity generator complies with the requirements in Subsection R315-262-17(a)(6) and (7).

(d) F006 transported over 200 miles. A large quantity generator who also generates wastewater treatment sludges from electroplating operations that meet the listing description for the EPA hazardous waste number F006, and who shall transport this waste, or offer this waste for transportation, over a distance of 200 miles or more for off-site metals recovery, may accumulate F006 waste on site for more than 90 days, but not more than 270 days without being subject to Rules R315-124, R315-264 through R315-266, R315-270, and the notification requirements of section 3010 of RCRA, if the large quantity generator complies with all of the conditions for exemption of Subsections R315-262-17(c)(1) through (4).

(e) F006 accumulation time extension. A large quantity generator accumulating F006 in accordance with Subsections R315-262-17(c) and (d) who accumulates F006 waste on site for more than 180 days, or for more than 270 days if the generator shall transport this waste, or offer this waste for transportation, over a distance of 200 miles or more, or who accumulates more than 20,000 kilograms of F006 waste on site is an operator of a storage facility and is subject to the requirements of Rules R315-124, R315-264, R315-265, and R315-270, and the notification requirements of section 3010 of RCRA, unless the generator has been granted an extension to the 180-day, or 270-day if applicable, period or an exception to the 20,000 kilogram accumulation limit. Such extensions and exceptions may be granted by the Director if F006 waste shall remain on site for longer than 180 days (or 270 days if applicable) or if more than 20,000 kilograms of F006 waste shall remain on site due to unforeseen, temporary, and uncontrollable circumstances. An extension of up to 30 days or an exception to the accumulation limit may be granted at the discretion of the Director on a case-by-case basis.

(f) Consolidation of hazardous waste received from very small quantity generators. Large quantity generators may accumulate on site hazardous waste received from very small quantity generators under control of the same person, as defined in Section R315-260-10, without a storage permit or interim status and without complying with the requirements of Rules R315-124, R315-264 through R315-266, R315-268, and R315-270, and the notification requirements of section 3010 of RCRA, provided that they comply with the following conditions. "Control," for the purposes of this section, means the power to direct the policies of the generator, whether by the ownership of stock, voting rights, or otherwise, except that contractors who operate generator facilities on behalf of a different person shall not be deemed to "control" such generators.

(1) The large quantity generator notifies the Director at least thirty (30) days prior to receiving the first shipment from a very small quantity generator(s) using EPA Form 8700-12; and

(i) Identifies on the form the name(s) and site address(es) for the very small quantity generator(s) as well as the name and

business telephone number for a contact person for the very small quantity generator(s); and

(ii) Submits an updated Site ID form (EPA Form 8700-12) within 30 days after a change in the name or site address for the very small quantity generator.

(2) The large quantity generator maintains records of shipments for three years from the date the hazardous waste was received from the very small quantity generator. These records shall identify the name, site address, and contact information for the very small quantity generator and include a description of the hazardous waste received, including the quantity and the date the waste was received.

(3) The large quantity generator complies with the independent requirements identified in Subsection R315-262-10(a)(1)(iii) and the conditions for exemption in Subsection R315-262-17(f) for all hazardous waste received from a very small quantity generator. For purposes of the labeling and marking regulations in Subsection R315-262-17(a)(5), the large quantity generator shall label the container or unit with the date accumulation started, i.e., the date the hazardous waste was received from the very small quantity generator. If the large quantity generator is consolidating incoming hazardous waste from a very small quantity generator with either its own hazardous waste or with hazardous waste from other very small quantity generators, the large quantity generator shall label each container or unit with the earliest date any hazardous waste in the container was accumulated on site.

(g) Rejected load. A large quantity generator who sends a shipment of hazardous waste to a designated facility with the understanding that the designated facility can accept and manage the waste and later receives that shipment back as a rejected load or residue in accordance with the manifest discrepancy provisions of Sections R315-264-72 or 40 CFR 265.72, which is incorporated by reference in Section R315-265-1, may accumulate the returned waste on site in accordance with Subsections R315-262-17(a) and (b). Upon receipt of the returned shipment, the generator shall:

(1) Sign Item 18c of the manifest, if the transporter returned the shipment using the original manifest; or

(2) Sign Item 20 of the manifest, if the transporter returned the shipment using a new manifest.

R315-262-18. General -- EPA Identification Numbers and Re-Notification for Small Quantity Generators and Large Quantity Generators.

(a) A generator shall not treat, store, dispose of, transport, or offer for transportation, hazardous waste without having received an EPA identification number from the Director.

(b) A generator who has not received an EPA identification number shall obtain one by applying to the Director using EPA Form 8700-12. Upon receiving the request the Director will assign an EPA identification number to the generator.

(c) A generator shall not offer its hazardous waste to transporters or to treatment, storage, or disposal facilities that have not received an EPA identification number.

(d) Re-notification.

(1) A small quantity generator shall re-notify the Director starting in 2021 and every four years thereafter using EPA Form 8700-12. This re-notification shall be submitted by September 1st of each year in which re-notifications are required.

(2) A large quantity generator shall re-notify the Director by March 1 of each even-numbered year thereafter using EPA Form 8700-12. A large quantity generator may submit this re-notification as part of its Biennial Report required under Section R315-262-41.

(e) A recognized trader shall not arrange for import or export of hazardous waste without having received an EPA identification number from the Director.

R315-262-20. Manifest Requirements Applicable to Small and Large Quantity Generators -- General Requirements.

(a)(1) A generator who transports, or offers for transport a hazardous waste for offsite treatment, storage, or disposal, or a treatment, storage, and disposal facility who offers for transport a rejected hazardous waste load, shall prepare a Manifest (OMB Control number 2050-0039) on EPA Form 8700-22, and, if necessary, EPA Form 8700-22A, according to the instructions included in the appendix to Rule R315-262.

(2) Reserved.

(3) Electronic manifest. In lieu of using the manifest form specified in Subsection R315-262-20(a)(1), a person required to prepare a manifest under Subsection R315-262-20(a)(1) may prepare and use an electronic manifest, provided that the person:

(i) Complies with the requirements in Section R315-262-24 for use of electronic manifests, and

(ii) Complies with the requirements of 40 CFR 3.10 for the reporting of electronic documents to EPA.

(b) A generator shall designate on the manifest one facility which is permitted to handle the waste described on the manifest.

(c) A generator may also designate on the manifest one alternate facility which is permitted to handle his waste in the event an emergency prevents delivery of the waste to the primary designated facility.

(d) If the transporter is unable to deliver the hazardous waste to the designated facility or the alternate facility, the generator shall either designate another facility or instruct the transporter to return the waste.

(e) The requirements of Section R315-262-20 through 27 do not apply to hazardous waste produced by generators of greater than 100 kg but less than 1000 kg in a calendar month where:

(1) The waste is reclaimed under a contractual agreement pursuant to which:

(i) The type of waste and frequency of shipments are specified in the agreement;

(ii) The vehicle used to transport the waste to the recycling facility and to deliver regenerated material back to the generator is owned and operated by the reclaimer of the waste; and

(2) The generator maintains a copy of the reclamation agreement in his files for a period of at least three years after termination or expiration of the agreement.

(f) The requirements of Sections R315-262-20 through 27 and Subsection R315-262-32(b) do not apply to the transport of hazardous wastes on a public or private right-of-way within or along the border of contiguous property under the control of the same person, even if such contiguous property is divided by a public or private right-of-way. Notwithstanding Subsection R315-263-10(a), the generator or transporter shall comply with the requirements for transporters set forth in Sections R315-263-30 and 31 in the event of a discharge of hazardous waste on a public or private right-of-way.

R315-262-21. Manifest Requirements Applicable to Small and Large Quantity Generators -- Manifest Tracking Numbers, Manifest Printing, and Obtaining Manifests.

(a)(1) A registrant may not print, or have printed, the manifest for use of distribution unless it has received approval from the EPA Director of the Office of Resource Conservation and Recovery to do so under Subsection R315-262-21(c) and (e).

(2) The approved registrant is responsible for ensuring that the organizations identified in its application are in compliance with the procedures of its approved application and the requirements of Section R315-262-21. The registrant is responsible for assigning manifest tracking numbers to its manifests.

(b) A registrant shall submit an initial application to the

EPA Director of the Office of Resource Conservation and Recovery that contains the following information:

(1) Name and mailing address of registrant;

(2) Name, telephone number and email address of contact person;

(3) Brief description of registrant's government or business activity;

(4) EPA identification number of the registrant, if applicable;

(5) Description of the scope of the operations that the registrant plans to undertake in printing, distributing, and using its manifests, including:

(i) A description of the printing operation. The description should include an explanation of whether the registrant intends to print its manifests in-house, i.e., using its own printing establishments, or through a separate, i.e., unaffiliated, printing company. If the registrant intends to use a separate printing company to print the manifest on its behalf, the application shall identify this printing company and discuss how the registrant will oversee the company. If this includes the use of intermediaries, e.g., prime and subcontractor relationships, the role of each shall be discussed. The application shall provide the name and mailing address of each company. It also shall provide the name and telephone number of the contact person at each company.

(ii) A description of how the registrant will ensure that its organization and unaffiliated companies, if any, comply with the requirements of Section R315-262-21. The application shall discuss how the registrant will ensure that a unique manifest tracking number will be pre-printed on each manifest. The application shall describe the internal control procedures to be followed by the registrant and unaffiliated companies to ensure that numbers are tightly controlled and remain unique. In particular, the application shall describe how the registrant will assign manifest tracking numbers to its manifests. If computer systems or other infrastructure will be used to maintain, track, or assign numbers, these should be indicated. The application shall also indicate how the printer will pre-print a unique number on each form, e.g., crash or press numbering. The application also shall explain the other quality procedures to be followed by each establishment and printing company to ensure that all required print specifications are consistently achieved and that printing violations are identified and corrected at the earliest practicable time.

(iii) An indication of whether the registrant intends to use the manifests for its own business operations or to distribute the manifests to a separate company or to the general public, e.g., for purchase.

(6) A brief description of the qualifications of the company that will print the manifest. The registrant may use readily available information to do so, e.g., corporate brochures, product samples, customer references, documentation of ISO certification, so long as such information pertains to the establishments or company being proposed to print the manifest.

(7) Proposed unique three-letter manifest tracking number suffix. If the registrant is approved to print the manifest, the registrant shall use this suffix to pre-print a unique manifest tracking number on each manifest.

(8) A signed certification by a duly authorized employee of the registrant that the organizations and companies in its application will comply with the procedures of its approved application and the requirements of Section R315-262-21 and that it will notify the EPA Director of the Office of Resource Conservation and Recovery of any duplicated manifest tracking numbers on manifests that have been used or distributed to other parties as soon as this becomes known.

(c) EPA shall review the application submitted under Subsection R315-262-21(b) and either approve it or request additional information or modification before approving it.

(d)(1) Upon EPA approval of the application under Subsection R315-262-21(c), EPA shall provide the registrant an electronic file of the manifest, continuation sheet, and manifest instructions and ask the registrant to submit three fully assembled manifests and continuation sheet samples, except as noted in Subsection R315-262-21(d)(3). The registrant's samples shall meet all of the specifications in Subsection R315-262-21(f) and be printed by the company that will print the manifest as identified in the application approved under Subsection R315-262-21(c).

(2) The registrant shall submit a description of the manifest samples as follows:

(i) Paper type, i.e., manufacturer and grade of the manifest paper;

(ii) Paper weight of each copy;

(iii) Ink color of the manifest's instructions. If screening of the ink was used, the registrant shall indicate the extent of the screening; and

(iv) Method of binding the copies.

(3) The registrant need not submit samples of the continuation sheet if it will print its continuation sheet using the same paper type, paper weight of each copy, ink color of the instructions, and binding method as its manifest form samples.

(e) EPA shall evaluate the forms and either approve the registrant to print them as proposed or request additional information or modification to them before approval. EPA shall notify the registrant of its decision by mail. The registrant cannot use or distribute its forms until EPA approves them. An approved registrant shall print the manifest and continuation sheet according to its application approved under Subsection R315-262-21(c) and the manifest specifications in Subsection R315-262-21(f). It also shall print the forms according to the paper type, paper weight, ink color of the manifest instructions and binding method of its approved forms.

(f) Paper manifests and continuation sheets shall be printed according to the following specifications:

(1) The manifest and continuation sheet shall be printed with the exact format and appearance as EPA Forms 8700-22 and 8700-22A, respectively. However, information required to complete the manifest may be pre-printed on the manifest form.

(2) A unique manifest tracking number assigned in accordance with a numbering system approved by EPA shall be pre-printed in Item 4 of the manifest. The tracking number shall consist of a unique three-letter suffix following nine digits.

(3) The manifest and continuation sheet shall be printed on 8 1/2 x 11-inch white paper, excluding common stubs, e.g., top- or side-bound stubs. The paper shall be durable enough to withstand normal use.

(4) The manifest and continuation sheet shall be printed in black ink that can be legibly photocopied, scanned, or faxed, except that the marginal words indicating copy distribution shall be printed with a distinct ink color or with another method; e.g., white text against black background in text box, or, black text against grey background in text box; that clearly distinguishes the copy distribution notations from the other text and data entries on the form.

(5) The manifest and continuation sheet shall be printed as six-copy forms. Copy-to-copy registration shall be exact within 1/32 nd of an inch. Handwritten and typed impressions on the form shall be legible on all six copies. Copies shall be bound together by one or more common stubs that reasonably ensure that they will not become detached inadvertently during normal use.

(6) Each copy of the manifest and continuation sheet shall indicate how the copy shall be distributed, as follows:

(i) Page 1, top copy: "Designated facility to destination State, if required".

(ii) Page 2: "Designated facility to generator State, if required".

(iii) Page 3: "Designated facility to generator".

(iv) Page 4: "Designated facility's copy".

(v) Page 5: "Transporter's copy".

(vi) Page 6 (bottom copy): "Generator's initial copy".

(7) The instructions in the appendix to Rule R315-262 shall appear legibly on the back of the copies of the manifest and continuation sheet as provided in Subsection R315-262-21(f). The instructions shall not be visible through the front of the copies when photocopied or faxed.

(i) Manifest EPA Form 8700-22.

(A) The "Instructions for Generators" on Copy 6;

(B) The "Instructions for International Shipment Block" and "Instructions for Transporters" on Copy 5; and

(C) The "Instructions for Treatment, Storage, and Disposal Facilities" on Copy 4.

(ii) Manifest EPA Form 8700-22A.

(A) The "Instructions for Generators" on Copy 6;

(B) The "Instructions for Transporters" on Copy 5; and

(C) The "Instructions for Treatment, Storage, and Disposal Facilities" on Copy 4.

(g)(1) A generator may use manifests printed by any source so long as the source of the printed form has received approval from EPA to print the manifest under Subsections R315-262-21(c) and (e). A registered source may be a:

(i) State agency;

(ii) Commercial printer;

(iii) Hazardous waste generator, transporter or TSDF; or

(iv) Hazardous waste broker or other preparer who prepares or arranges shipments of hazardous waste for transportation.

(2) A generator shall determine whether the generator state or the consignment state for a shipment regulates any additional wastes, beyond those regulated Federally, as hazardous wastes under these states' authorized programs. Generators also shall determine whether the consignment state or generator state requires the generator to submit any copies of the manifest to these states. In cases where the generator shall supply copies to either the generator's state or the consignment state, the generator is responsible for supplying legible photocopies of the manifest to these states.

(h)(1) If an approved registrant would like to update any of the information provided in its application approved under Subsection R315-262-21(c), e.g., to update a company phone number or name of contact person, the registrant shall revise the application and submit it to the EPA Director of the Office of Resource Conservation and Recovery, along with an indication or explanation of the update, as soon as practicable after the change occurs. The Agency either shall approve or deny the revision. If the Agency denies the revision, it shall explain the reasons for the denial, and it shall contact the registrant and request further modification before approval.

(2) If the registrant would like a new tracking number suffix, the registrant shall submit a proposed suffix to the EPA Director of the Office of Resource Conservation and Recovery, along with the reason for requesting it. The Agency shall either approve the suffix or deny the suffix and provide an explanation why it is not acceptable.

(3) If a registrant would like to change the paper type, paper weight, ink color of the manifest instructions, or binding method of its manifest or continuation sheet subsequent to approval under Subsection R315-262-21(e), then the registrant shall submit three samples of the revised form for EPA review and approval. If the approved registrant would like to use a new printer, the registrant shall submit three manifest samples printed by the new printer, along with a brief description of the printer's qualifications to print the manifest. EPA shall evaluate the manifests and either approve the registrant to print the forms as proposed or request additional information or modification to them before approval. EPA shall notify the registrant of its

decision by mail. The registrant cannot use or distribute its revised forms until EPA approves them.

(i) If, subsequent to its approval under Subsection R315-262-21(e), a registrant typesets its manifest or continuation sheet instead of using the electronic file of the forms provided by EPA, it shall submit three samples of the manifest or continuation sheet to the registry for approval. EPA shall evaluate the manifests or continuation sheets and either approve the registrant to print them as proposed or request additional information or modification to them before approval. EPA shall notify the registrant of its decision by mail. The registrant cannot use or distribute its typeset forms until EPA approves them.

(j) EPA may exempt a registrant from the requirement to submit form samples under Subsection R315-262-21(d) or (h)(3) if the Agency is persuaded that a separate review of the registrant's forms would serve little purpose in informing an approval decision; e.g., a registrant certifies that it will print the manifest using the same paper type, paper weight, ink color of the instructions and binding method of the form samples approved for some other registrant. A registrant may request an exemption from EPA by indicating why an exemption is warranted.

(k) An approved registrant shall notify EPA by phone or email as soon as it becomes aware that it has duplicated tracking numbers on any manifests that have been used or distributed to other parties.

(l) If, subsequent to approval of a registrant under Subsection R315-262-21(e), EPA becomes aware that the approved paper type, paper weight, ink color of the instructions, or binding method of the registrant's form is unsatisfactory, EPA shall contact the registrant and require modifications to the form.

(m)(1) EPA may suspend and, if necessary, revoke printing privileges if we find that the registrant:

(i) Has used or distributed forms that deviate from its approved form samples in regard to paper weight, paper type, ink color of the instructions, or binding method; or

(ii) Exhibits a continuing pattern of behavior in using or distributing manifests that contain duplicate manifest tracking numbers.

(2) EPA shall send a warning letter to the registrant that specifies the date by which it shall come into compliance with the requirements. If the registrant does not come in compliance by the specified date, EPA shall send a second letter notifying the registrant that EPA has suspended or revoked its printing privileges. An approved registrant shall provide information on its printing activities to EPA if requested.

R315-262-22. Manifest Requirements Applicable to Small and Large Quantity Generators -- Number of Copies.

The manifest consists of at least the number of copies which will provide the generator, each transporter, and the owner or operator of the designated facility with one copy each for their records and another copy to be returned to the generator.

R315-262-23. Manifest Requirements Applicable to Small and Large Quantity Generators -- Use of the Manifest.

(a) The generator shall:

(1) Sign the manifest certification by hand; and

(2) Obtain the handwritten signature of the initial transporter and date of acceptance on the manifest; and

(3) Retain one copy, in accordance with Subsection R315-262-40(a).

(b) The generator shall give the transporter the remaining copies of the manifest.

(c) For shipments of hazardous waste within Utah solely by water, bulk shipments only, the generator shall send three

copies of the manifest dated and signed in accordance with Section R315-262-23 to the owner or operator of the designated facility or the last water, bulk shipment, transporter to handle the waste in the United States if exported by water. Copies of the manifest are not required for each transporter.

(d) For rail shipments of hazardous waste within Utah which originate at the site of generation, the generator shall send at least three copies of the manifest dated and signed in accordance with Section R315-262-23 to:

(1) The next non-rail transporter, if any; or

(2) The designated facility if transported solely by rail; or

(3) The last rail transporter to handle the waste in the United States if exported by rail.

(e) For shipments of hazardous waste to a designated facility in an authorized State which has not yet obtained federal authorization to regulate that particular waste as hazardous, the generator shall assure that the designated facility agrees to sign and return the manifest to the generator, and that any out-of-state transporter signs and forwards the manifest to the designated facility.

Note: See Subsections R315-263-20(e) and (f) for special provisions for rail or water, bulk shipment, transporters.

(f) For rejected shipments of hazardous waste or container residues contained in non-empty containers that are returned to the generator by the designated facility, following the procedures of Subsections R315-264-72(f) or 40 CFR 265.72(f), which is adopted by reference in Section R315-265-1; the generator shall:

(1) Sign either:

(i) Item 20 of the new manifest if a new manifest is used for the returned shipment; or

(ii) Item 18c of the original manifest if the original manifest is used for the returned shipment;

(2) Provide the transporter a copy of the manifest;

(3) Within 30 days of delivery of the rejected shipment or container residues contained in non-empty containers, send a copy of the manifest to the designated facility that returned the shipment to the generator; and

(4) Retain at the generator's site a copy of each manifest for at least three years from the date of delivery.

R315-262-24. Manifest Requirements Applicable to Small and Large Quantity Generators -- Use of the Electronic Manifest.

(a) Legal equivalence to paper manifests. Electronic manifests that are obtained, completed, and transmitted in accordance with Subsection R315-262-20(a)(3), and used in accordance with Section R315-262-24 in lieu of EPA Forms 8700-22 and 8700-22A are the legal equivalent of paper manifest forms bearing handwritten signatures, and satisfy for all purposes any requirement in these regulations to obtain, complete, sign, provide, use, or retain a manifest.

(1) Any requirement in these regulations to sign a manifest or manifest certification by hand, or to obtain a handwritten signature, is satisfied by signing with or obtaining a valid and enforceable electronic signature within the meaning of Section R315-262-25.

(2) Any requirement in these regulations to give, provide, send, forward, or return to another person a copy of the manifest is satisfied when an electronic manifest is transmitted to the other person by submission to the system.

(3) Any requirement in these regulations for a generator to keep or retain a copy of each manifest is satisfied by retention of a signed electronic manifest in the generator's account on the national e-Manifest system, provided that such copies are readily available for viewing and production if requested by any EPA or Utah inspector.

(4) No generator may be held liable for the inability to produce an electronic manifest for inspection under Section

R315-262-24 if the generator can demonstrate that the inability to produce the electronic manifest is due exclusively to a technical difficulty with the electronic manifest system for which the generator bears no responsibility.

(b) A generator may participate in the electronic manifest system either by accessing the electronic manifest system from its own electronic equipment, or by accessing the electronic manifest system from portable equipment brought to the generator's site by the transporter who accepts the hazardous waste shipment from the generator for off-site transportation.

(c) Restriction on use of electronic manifests. A generator may prepare an electronic manifest for the tracking of hazardous waste shipments involving any RCRA hazardous waste only if it is known at the time the manifest is originated that all waste handlers named on the manifest participate in the electronic manifest system.

(d) Requirement for one printed copy. To the extent the Hazardous Materials regulation on shipping papers for carriage by public highway requires shippers of hazardous materials to supply a paper document for compliance with 49 CFR 177.817, a generator originating an electronic manifest shall also provide the initial transporter with one printed copy of the electronic manifest.

(e) Special procedures when electronic manifest is unavailable. If a generator has prepared an electronic manifest for a hazardous waste shipment, but the electronic manifest system becomes unavailable for any reason prior to the time that the initial transporter has signed electronically to acknowledge the receipt of the hazardous waste from the generator, then the generator shall obtain and complete a paper manifest and if necessary, a continuation sheet (EPA Forms 8700-22 and 8700-22A) in accordance with the manifest instructions in the appendix to Rule R315-262, and use these paper forms from this point forward in accordance with the requirements of Section R315-262-23.

(f) Special procedures for electronic signature methods undergoing tests. If a generator has prepared an electronic manifest for a hazardous waste shipment, and signs this manifest electronically using an electronic signature method which is undergoing pilot or demonstration tests aimed at demonstrating the practicality or legal dependability of the signature method, then the generator shall also sign with an ink signature the generator/officer certification on the printed copy of the manifest provided under Subsection R315-262-24(d).

(g) Imposition of user fee. A generator who is a user of the electronic manifest may be assessed a user fee by EPA for the origination of each electronic manifest. EPA shall maintain and update from time-to-time the current schedule of electronic manifest user fees, which shall be determined based on current and projected system costs and level of use of the electronic manifest system. The current schedule of electronic manifest user fees shall be published as an appendix to Rule R315-262.

R315-262-25. Manifest Requirements Applicable to Small and Large Quantity Generators -- Electronic Manifest Signatures.

Electronic signature methods for the e-Manifest system shall:

(a) Be a legally valid and enforceable signature under applicable EPA and other Federal requirements pertaining to electronic signatures; and

(b) Be a method that is designed and implemented in a manner that EPA considers to be as cost-effective and practical as possible for the users of the manifest.

R315-262-27. Manifest Requirements Applicable to Small and Large Quantity Generators -- Waste Minimization Certification.

A generator who initiates a shipment of hazardous waste

shall certify to one of the following statements in Item 15 of the uniform hazardous waste manifest:

(a) "I am a large quantity generator. I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment;" or

(b) "I am a small quantity generator. I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford."

R315-262-30. Pre-Transport Requirements Applicable to Small and Large Quantity Generators -- Packaging.

Before transporting hazardous waste or offering hazardous waste for transportation off-site, a generator shall package the waste in accordance with the applicable Department of Transportation regulations on packaging under 49 CFR parts 173, 178, and 179.

R315-262-31. Pre-Transport Requirements Applicable to Small and Large Quantity Generators -- Labeling.

Before transporting or offering hazardous waste for transportation off-site, a generator shall label each package in accordance with the applicable Department of Transportation regulations on hazardous materials under 49 CFR part 172.

R315-262-32. Pre-Transport Requirements Applicable to Small and Large Quantity Generators -- Marking.

(a) Before transporting or offering hazardous waste for transportation off-site, a generator shall mark each package of hazardous waste in accordance with the applicable Department of Transportation regulations on hazardous materials under 49 CFR part 172;

(b) Before transporting hazardous waste or offering hazardous waste for transportation off site, a generator shall mark each container of 119 gallons or less used in such transportation with the following words and information in accordance with the requirements of 49 CFR 172.304:

(1) HAZARDOUS WASTE-Federal Law Prohibits Improper Disposal. If found, contact the nearest police or public safety authority or the U.S. Environmental Protection Agency.

(2) Generator's Name and Address _____.

(3) Generator's EPA Identification Number _____.

(4) Manifest Tracking Number _____.

(5) EPA Hazardous Waste Number(s) _____.

(c) A generator may use a nationally recognized electronic system, such as bar coding, to identify the EPA Hazardous Waste Number(s), as required by Subsection R315-262-32(b)(5) or paragraph (d).

(d) Lab packs that will be incinerated in compliance with Subsection R315-268-42(c) are not required to be marked with EPA Hazardous Waste Number(s), except D004, D005, D006, D007, D008, D010, and D011, where applicable.

R315-262-33. Pre-Transport Requirements Applicable to Small and Large Quantity Generators -- Placarding.

Before transporting hazardous waste or offering hazardous waste for transportation off-site, a generator shall placard or offer the initial transporter the appropriate placards according to Department of Transportation regulations for hazardous materials under 49 CFR part 172, subpart F.

R315-262-35. Pre-Transport Requirements Applicable to Small and Large Quantity Generators -- Liquids in Landfills Prohibition.

The placement of bulk or non-containerized liquid

hazardous waste or hazardous waste containing free liquids (whether or not sorbents have been added) in any landfill is prohibited. Prior to disposal in a hazardous waste landfill, liquids shall meet additional requirements as specified in Sections R315-264-314 and 40 CFR 265.314, which is incorporated by reference in Section R315-265-1.

R315-262-40. Recordkeeping and Reporting Applicable to Small and Large Quantity Generators -- Recordkeeping.

(a) A generator shall keep a copy of each manifest signed in accordance with Subsection R315-262-23(a) for three years or until he receives a signed copy from the designated facility which received the waste. This signed copy shall be retained as a record for at least three years from the date the waste was accepted by the initial transporter.

(b) A generator shall keep a copy of each Biennial Report and Exception Report for a period of at least three years from the due date of the report.

(c) A generator shall follow Subsection R315-262-11(f) for recordkeeping requirements for documenting hazardous waste determinations.

(d) The periods or retention referred to in Section R315-262-40 are extended automatically during the course of any unresolved enforcement action regarding the regulated activity or as requested by the Director.

(e) Records maintained in accordance with Section R315-262-40 and any other records which the Director deems necessary to determine quantities and disposition of hazardous waste or other determinations, test results, or waste analyses made in accordance with R315-262-11 shall be available for inspection by any duly authorized officer, employee or representative of the Department or the Director as provided in R315-260-5 for a period of at least three years from the date the waste was last sent to on-site or off-site treatment, storage, or disposal facilities.

R315-262-41. Recordkeeping and Reporting Applicable to Small and Large Quantity Generators -- Biennial Report for Large Quantity Generators.

(a) A generator who is a large quantity generator for at least one month of an odd-numbered year, reporting year, who ships any hazardous waste off-site to a treatment, storage or disposal facility within the United States shall complete and submit EPA Form 8700-13 A/B to the Director by March 1 of the following even-numbered year and shall cover generator activities during the previous year.

(b) Any generator who is a large quantity generator for at least one month of an odd-numbered year (reporting year) who treats, stores, or disposes of hazardous waste on site shall complete and submit EPA Form 8700-13 A/B to the Director by March 1 of the following even-numbered year covering those wastes in accordance with the provisions of Rules R315-264, R315-265, R315-266, and R315-270. This requirement also applies to large quantity generators that receive hazardous waste from very small quantity generators pursuant to Subsection R315-262-17(f).

(c) Exports of hazardous waste to foreign countries are not required to be reported on the Biennial Report form. A separate annual report requirement is set forth at Subsection R315-262-83(g) for hazardous waste exporters.

R315-262-42. Recordkeeping and Reporting Applicable to Small and Large Quantity Generators -- Exception Reporting.

(a)(1) A generator of 1,000 kilograms or greater of hazardous waste in a calendar month, or greater than 1 kg of acute hazardous waste listed in Section R315-261-31 or Subsection R315-261-33(e) in a calendar month, who does not receive a copy of the manifest with the handwritten signature of

the owner or operator of the designated facility within 35 days of the date the waste was accepted by the initial transporter shall contact the transporter and/or the owner or operator of the designated facility to determine the status of the hazardous waste.

(2) A generator of 1,000 kilograms or greater of hazardous waste in a calendar month, or greater than 1 kg of acute hazardous waste listed in Section R315-261-31 or Subsection R315-261-33(e) in a calendar month, shall submit an Exception Report to the Director if he has not received a copy of the manifest with the handwritten signature of the owner or operator of the designated facility within 45 days of the date the waste was accepted by the initial transporter. The Exception Report shall include:

(i) A legible copy of the manifest for which the generator does not have confirmation of delivery;

(ii) A cover letter signed by the generator or his authorized representative explaining the efforts taken to locate the hazardous waste and the results of those efforts.

(b) A generator of greater than 100 kilograms but less than 1000 kilograms of hazardous waste in a calendar month who does not receive a copy of the manifest with the handwritten signature of the owner or operator of the designated facility within 60 days of the date the waste was accepted by the initial transporter shall submit a legible copy of the manifest, with some indication that the generator has not received confirmation of delivery, to the Director.

Note: The submission to the Director need only be a handwritten or typed note on the manifest itself, or on an attached sheet of paper, stating that the return copy was not received.

(c) For rejected shipments of hazardous waste or container residues contained in non-empty containers that are forwarded to an alternate facility by a designated facility using a new manifest, following the procedures of Subsections R315-264-72(e)(1) through (6) or 40 CFR 265.72(e)(1) through (6), which are adopted by reference; the generator shall comply with the requirements of Subsections R315-262-42(a) or (b), as applicable, for the shipment forwarding the material from the designated facility to the alternate facility instead of for the shipment from the generator to the designated facility. For purposes of Subsection R315-262-42(a) or (b) for a shipment forwarding such waste to an alternate facility by a designated facility:

(1) The copy of the manifest received by the generator shall have the handwritten signature of the owner or operator of the alternate facility in place of the signature of the owner or operator of the designated facility, and

(2) The 35/45/60-day timeframes begin the date the waste was accepted by the initial transporter forwarding the hazardous waste shipment from the designated facility to the alternate facility.

R315-262-43. Recordkeeping and Reporting Applicable to Small and Large Quantity Generators -- Additional Reporting.

The Director, as he deems necessary, may require generators to furnish additional reports concerning the quantities and disposition of wastes identified or listed in Rule R315-261.

R315-262-44. Recordkeeping and Reporting Applicable to Small and Large Quantity Generators -- Recordkeeping for Small Quantity Generators.

A small quantity generator is subject only to the following independent requirements in Sections R315-262-40 through R315-262-43:

(a) Subsection R315-262-40(a), (c), and (d), recordkeeping;

- (b) Subsection R315-262-42(b), exception reporting; and
- (c) Section R315-262-43, additional reporting.

R315-262-50. Exports of Hazardous Waste -- Applicability.

Sections R315-262-50 through 58 establish requirements applicable to exports of hazardous waste. Except to the extent Section R315-262-58 provides otherwise, a primary exporter of hazardous waste shall comply with the special requirements of Sections R315-262-50 through 58 and a transporter transporting hazardous waste for export shall comply with applicable requirements of Rule R315-263. Section R315-262-58 sets forth the requirements of international agreements between the United States and receiving countries which establish different notice, export, and enforcement procedures for the transportation, treatment, storage and disposal of hazardous waste for shipments between the United States and those countries.

R315-262-51. Exports of Hazardous Waste -- Definitions.

In addition to the definitions set forth at Section R315-260-10, the following definitions apply to Sections R315-262-50 through 58:

Consignee means the ultimate treatment, storage or disposal facility in a receiving country to which the hazardous waste will be sent.

EPA Acknowledgement of Consent means the cable sent to EPA from the U.S. Embassy in a receiving country that acknowledges the written consent of the receiving country to accept the hazardous waste and describes the terms and conditions of the receiving country's consent to the shipment. Primary Exporter means any person who is required to originate the manifest for a shipment of hazardous waste in accordance with Sections R315-262-20 through 25 and 27 which specifies a treatment, storage, or disposal facility in a receiving country as the facility to which the hazardous waste will be sent and any intermediary arranging for the export.

Receiving country means a foreign country to which a hazardous waste is sent for the purpose of treatment, storage or disposal, except short-term storage incidental to transportation. Transit country means any foreign country, other than a receiving country, through which a hazardous waste is transported.

R315-262-52. Exports of Hazardous Waste -- General Requirements.

Exports of hazardous waste are prohibited except in compliance with the applicable requirements of Sections R315-262-50 through 58 and Rule R315-263. Exports of hazardous waste are prohibited unless:

- (a) Notification in accordance with Section R315-262-53 has been provided;
- (b) The receiving country has consented to accept the hazardous waste;
- (c) A copy of the EPA Acknowledgment of Consent to the shipment accompanies the hazardous waste shipment and, unless exported by rail, is attached to the manifest; or shipping paper for exports by water, bulk shipment.
- (d) The hazardous waste shipment conforms to the terms of the receiving country's written consent as reflected in the EPA Acknowledgment of Consent.

R315-262-53. Exports of Hazardous Waste -- Notification of Intent to Export.

(a) A primary exporter of hazardous waste shall notify EPA of an intended export before such waste is scheduled to leave the United States. A complete notification should be submitted sixty days before the initial shipment is intended to be shipped off site. This notification may cover export activities extending over a twelve month or lesser period. The notification

shall be in writing, signed by the primary exporter, and include the following information:

- (1) Name, mailing address, telephone number and EPA ID number of the primary exporter;
- (2) By consignee, for each hazardous waste type:
 - (i) A description of the hazardous waste and the EPA hazardous waste number, from Sections R315-261-20 through 24, and R315-261-30 through 35, U.S. DOT proper shipping name, hazard class and ID number (UN/NA) for each hazardous waste as identified in 49 CFR parts 171 through 177;
 - (ii) The estimated frequency or rate at which such waste is to be exported and the period of time over which such waste is to be exported.
 - (iii) The estimated total quantity of the hazardous waste in units as specified in the instructions to the Uniform Hazardous Waste Manifest Form (8700-22);
 - (iv) All points of entry to and departure from each foreign country through which the hazardous waste will pass;
 - (v) A description of the means by which each shipment of the hazardous waste will be transported; e.g., mode of transportation vehicle, air, highway, rail, water, etc.; type(s) of container, drums, boxes, tanks, etc.;
 - (vi) A description of the manner in which the hazardous waste will be treated, stored or disposed of in the receiving country, e.g., land or ocean incineration, other land disposal, ocean dumping, recycling;
 - (vii) The name and site address of the consignee and any alternate consignee; and
 - (viii) The name of any transit countries through which the hazardous waste will be sent and a description of the approximate length of time the hazardous waste will remain in such country and the nature of its handling while there;

(b) Notifications submitted by mail should be sent to the following mailing address: Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division (2254A), Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460. Hand-delivered notifications should be sent to: Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division, Environmental Protection Agency, Ariel Rios Bldg., Room 6144, 12th St. and Pennsylvania Ave., NW., Washington, DC 20004. In both cases, the following shall be prominently displayed on the front of the envelope: "Attention: Notification of Intent to Export."

(c) Except for changes to the telephone number in Subsection R315-262-53(a)(1), changes to Subsection R315-262-53(a)(2)(v) and decreases in the quantity indicated pursuant to Subsection R315-262-53(a)(2)(iii) when the conditions specified in the original notification change, including any exceedance of the estimate of the quantity of hazardous waste specified in the original notification, the primary exporter shall provide EPA with a written renotification of the change. The shipment cannot take place until consent of the receiving country to the changes, except for changes to Subsection R315-262-53(a)(2)(viii) and in the ports of entry to and departure from transit countries pursuant to Subsection R315-262-53(a)(2)(iv), has been obtained and the primary exporter receives an EPA Acknowledgment of Consent reflecting the receiving country's consent to the changes.

(d) Upon request by EPA, a primary exporter shall furnish to EPA any additional information which a receiving country requests in order to respond to a notification.

(e) In conjunction with the Department of State, EPA shall provide a complete notification to the receiving country and any transit countries. A notification is complete when EPA receives a notification which EPA determines satisfies the requirements of Subsection R315-262-53(a). Where a claim of confidentiality is asserted with respect to any notification

information required by Subsection R315-262-53(a), EPA may find the notification not complete until any such claim is resolved in accordance with Section R315-260-2.

(f) Where the receiving country consents to the receipt of the hazardous waste, EPA shall forward an EPA Acknowledgment of Consent to the primary exporter for purposes of Subsection R315-262-54(h). Where the receiving country objects to receipt of the hazardous waste or withdraws a prior consent, EPA shall notify the primary exporter in writing. EPA shall also notify the primary exporter of any responses from transit countries.

R315-262-54. Exports of Hazardous Waste -- Special Manifest Requirements.

A primary exporter shall comply with the manifest requirements of Sections R315-262-20 through 23 except that:

(a) In lieu of the name, site address and EPA ID number of the designated permitted facility, the primary exporter shall enter the name and site address of the consignee;

(b) In lieu of the name, site address and EPA ID number of a permitted alternate facility, the primary exporter may enter the name and site address of any alternate consignee.

(c) In the International Shipments block, the primary exporter shall check the export box and enter the point of exit, city and State, from the United States.

(d) The following statement shall be added to the end of the first sentence of the certification set forth in Item 16 of the Uniform Hazardous Waste Manifest Form: "and conforms to the terms of the attached EPA Acknowledgment of Consent";

(e) The primary exporter may obtain the manifest from any source that is registered with the U.S. EPA as a supplier of manifests (e.g., states, waste handlers, and/or commercial forms printers).

(f) The primary exporter shall require the consignee to confirm in writing the delivery of the hazardous waste to that facility and to describe any significant discrepancies, as defined in Subsection R315-264-72(a), between the manifest and the shipment. A copy of the manifest signed by such facility may be used to confirm delivery of the hazardous waste.

(g) In lieu of the requirements of Subsection R315-262-20(d), where a shipment cannot be delivered for any reason to the designated or alternate consignee, the primary exporter shall:

(1) Renotify EPA of a change in the conditions of the original notification to allow shipment to a new consignee in accordance with Subsection R315-262-53(c) and obtain an EPA Acknowledgment of Consent prior to delivery; or

(2) Instruct the transporter to return the waste to the primary exporter in the United States or designate another facility within the United States; and

(3) Instruct the transporter to revise the manifest in accordance with the primary exporter's instructions.

(h) The primary exporter shall attach a copy of the EPA Acknowledgment of Consent to the shipment to the manifest which shall accompany the hazardous waste shipment. For exports by rail or water (bulk shipment), the primary exporter shall provide the transporter with an EPA Acknowledgment of Consent which shall accompany the hazardous waste but which need not be attached to the manifest except that for exports by water (bulk shipment) the primary exporter shall attach the copy of the EPA Acknowledgment of Consent to the shipping paper.

(i) The primary exporter shall provide the transporter with an additional copy of the manifest for delivery to the U.S. Customs official at the point the hazardous waste leaves the United States in accordance with Subsection R315-263-20(g)(4).

R315-262-55. Exports of Hazardous Waste -- Exception Reports.

In lieu of the requirements of Section R315-262-42, a

primary exporter shall file an exception report with the Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division (2254A), Environmental Protection Agency, 1200 Pennsylvania Avenue, NW., Washington, DC 20460, if any of the following occurs:

(a) He has not received a copy of the manifest signed by the transporter stating the date and place of departure from the United States within forty-five days from the date it was accepted by the initial transporter;

(b) Within ninety days from the date the waste was accepted by the initial transporter, the primary exporter has not received written confirmation from the consignee that the hazardous waste was received;

(c) The waste is returned to the United States.

R315-262-56. Exports of Hazardous Waste -- Annual Reports.

(a) Primary exporters of hazardous waste shall file with the Administrator no later than March 1 of each year, a report summarizing the types, quantities, frequency, and ultimate destination of all hazardous waste exported during the previous calendar year. Such reports shall include the following:

(1) The EPA identification number, name, and mailing and site address of the exporter;

(2) The calendar year covered by the report;

(3) The name and site address of each consignee;

(4) By consignee, for each hazardous waste exported, a description of the hazardous waste, the EPA hazardous waste number, from Sections R315-261-20 through 24 and R315-261-30 through 35, DOT hazard class, the name and US EPA ID number, where applicable, for each transporter used, the total amount of waste shipped and number of shipments pursuant to each notification;

(5) Except for hazardous waste produced by exporters of greater than 100 kg but less than 1000 kg in a calendar month, unless provided pursuant to Section R315-262-41, in even numbered years:

(i) A description of the efforts undertaken during the year to reduce the volume and toxicity of waste generated; and

(ii) A description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years to the extent such information is available for years prior to 1984.

(6) A certification signed by the primary exporter which states: I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

(b) Annual reports submitted by mail should be sent to the following mailing address: Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division (2254A), Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460. Hand-delivered reports should be sent to: Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division, Environmental Protection Agency, Ariel Rios Bldg., Room 6144, 12th St. and Pennsylvania Ave., NW., Washington, DC 20004.

R315-262-57. Exports of Hazardous Waste -- Recordkeeping.

(a) For all exports a primary exporter shall:

(1) Keep a copy of each notification of intent to export for

a period of at least three years from the date the hazardous waste was accepted by the initial transporter;

(2) Keep a copy of each EPA Acknowledgment of Consent for a period of at least three years from the date the hazardous waste was accepted by the initial transporter;

(3) Keep a copy of each confirmation of delivery of the hazardous waste from the consignee for at least three years from the date the hazardous waste was accepted by the initial transporter; and

(4) Keep a copy of each annual report for a period of at least three years from the due date of the report.

(b) The periods of retention referred to in Section R315-262-57 are extended automatically during the course of any unresolved enforcement action regarding the regulated activity or as requested by the Administrator.

R315-262-58. Exports of Hazardous Waste -- International Agreements.

(a) Any person who exports or imports wastes that are considered hazardous under U.S. national procedures to or from designated Member countries of the Organization for Economic Cooperation and Development (OECD) as defined in Subsection R315-262-58(a)(1) for purposes of recovery is subject to Sections R315-262-80 through 89. The requirements of Sections R315-262-50 through 58 and R315-262-60 do not apply to such exports and imports. A waste is considered hazardous under U.S. national procedures if the waste meets the Federal definition of hazardous waste in Section R315-261-3 and is subject to either the manifesting requirements Sections R315-262-20 through 25 and 27, the universal waste management standards of Rule R315-273, the export requirements in the spent lead-acid battery management standards of Section R315-266-80.

(1) For the purposes of Sections R315-262-80 through 89, the designated OECD Member countries consist of Australia, Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Poland, Portugal, the Republic of Korea, the Slovak Republic, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States.

(2) For the purposes of Sections R315-262-80 through 89, Canada and Mexico are considered OECD Member countries only for the purpose of transit.

(b) Any person who exports hazardous waste to or imports hazardous waste from: A designated OECD Member country for purposes other than recovery; e.g., incineration, disposal; Mexico, for any purpose; or Canada, for any purpose, remains subject to the requirements of Sections R315-262-50 through 58 and 60, and is not subject to the requirements of Sections R315-262-80 through 89.

R315-262-60. Imports of Hazardous Waste.

(a) Any person who imports hazardous waste from a foreign country into the United States shall comply with the requirements of Rule R315-262.

(b) When importing hazardous waste, a person shall meet all the requirements of Section R315-262-20 for the manifest except that:

(1) In place of the generator's name, address and EPA identification number, the name and address of the foreign generator and the importer's name, address and EPA identification number shall be used.

(2) In place of the generator's signature on the certification statement, the U.S. importer or his agent shall sign and date the certification and obtain the signature of the initial transporter.

(c) A person who imports hazardous waste may obtain the manifest form from any source that is registered with the U.S. EPA as a supplier of manifests; e.g., states, waste handlers,

and/or commercial forms printers.

(d) In the International Shipments block, the importer shall check the import box and enter the point of entry, city and State, into the United States.

(e) The importer shall provide the transporter with an additional copy of the manifest to be submitted by the receiving facility to U.S. EPA in accordance with Subsections R315-264-71(a)(3) and 40 CFR 265.71(a)(3), which is adopted by reference.

R315-262-70. Farmers.

A farmer disposing of waste pesticides from his own use which are hazardous wastes is not required to comply with the standards in Rule R315-262 or other standards in Rules R315-264, R315-265, R315-268, or R315-270 for those wastes provided he triple rinses each emptied pesticide container in accordance with Subsection R315-261-7(b)(3) and disposes of the pesticide residues on his own farm in a manner consistent with the disposal instructions on the pesticide label.

R315-262-80. Transboundary Movements of Hazardous Waste for Recovery or Disposal -- Applicability.

(a) The requirements of Sections R315-262-80 through 89 apply to imports and exports of wastes that are considered hazardous under U.S. national procedures and are destined for recovery operations in the countries listed in Subsection R315-262-58(a)(1). A waste is considered hazardous under U.S. national procedures if the waste:

(1) Meets the Federal definition of hazardous waste in Section R315-261-3; and

(2) Is subject to either the manifesting requirements Sections R315-262-20 through 25 and 27, the universal waste management standards of Rule R315-273, the export requirements in the spent lead-acid battery management standards of Section R315-266-80.

(b) Any person; exporter, importer, or recovery facility operator; who mixes two or more wastes, including hazardous and non-hazardous wastes, or otherwise subjects two or more wastes, including hazardous and non-hazardous wastes, to physical or chemical transformation operations, and thereby creates a new hazardous waste, becomes a generator and assumes all subsequent generator duties under RCRA and any exporter duties, if applicable, under Sections R315-262-80 through 89.

R315-262-81. Transboundary Movements of Hazardous Waste for Recovery or Disposal -- Definitions.

The following definitions apply to Sections R315-262-80 through 89.

Competent authority means the regulatory authority or authorities of concerned countries having jurisdiction over transboundary movements of wastes destined for recovery operations.

Countries concerned means the OECD Member countries of export or import and any OECD Member countries of transit.

Country of export means any designated OECD Member country listed in Subsection R315-262-58(a)(1) from which a transboundary movement of hazardous wastes is planned to be initiated or is initiated.

Country of import means any designated OECD Member country listed in Subsection R315-262-58(a)(1) to which a transboundary movement of hazardous wastes is planned or takes place for the purpose of submitting the wastes to recovery operations therein.

Country of transit means any designated OECD Member country listed in Subsections R315-262-58(a)(1) and (a)(2) other than the country of export or country of import across which a transboundary movement of hazardous wastes is planned or takes place.

Exporter means the person under the jurisdiction of the country of export who has, or will have at the time the planned transboundary movement commences, possession or other forms of legal control of the wastes and who proposes transboundary movement of the hazardous wastes for the ultimate purpose of submitting them to recovery operations. When the United States (U.S.) is the country of export, exporter is interpreted to mean a person domiciled in the United States.

Importer means the person to whom possession or other form of legal control of the waste is assigned at the time the waste is received in the country of import.

OECD area means all land or marine areas under the national jurisdiction of any OECD Member country listed in Section R315-262-58. When the regulations refer to shipments to or from an OECD Member country, this means OECD area.

OECD means the Organization for Economic Cooperation and Development.

Recognized trader means a person who, with appropriate authorization of countries concerned, acts in the role of principal to purchase and subsequently sell wastes; this person has legal control of such wastes from time of purchase to time of sale; such a person may act to arrange and facilitate transboundary movements of wastes destined for recovery operations.

Recovery facility means a facility which, under applicable domestic law, is operating or is authorized to operate in the country of import to receive wastes and to perform recovery operations on them.

Recovery operations means activities leading to resource recovery, recycling, reclamation, direct re-use or alternative uses, which include:

R1 Use as a fuel (other than in direct incineration) or other means to generate energy.

R2 Solvent reclamation/regeneration.

R3 Recycling/reclamation of organic substances which are not used as solvents.

R4 Recycling/reclamation of metals and metal compounds.

R5 Recycling/reclamation of other inorganic materials.

R6 Regeneration of acids or bases.

R7 Recovery of components used for pollution abatement.

R8 Recovery of components used from catalysts.

R9 Used oil re-refining or other reuses of previously used oil.

R10 Land treatment resulting in benefit to agriculture or ecological improvement.

R11 Uses of residual materials obtained from any of the operations numbered R1-R10.

R12 Exchange of wastes for submission to any of the operations numbered R1-R11.

R13 Accumulation of material intended for any operation numbered R1-R12.

Transboundary movement means any movement of wastes from an area under the national jurisdiction of one OECD Member country to an area under the national jurisdiction of another OECD Member country.

R315-262-82. Transboundary Movements of Hazardous Waste for Recovery or Disposal -- General Conditions.

(a) Scope. The level of control for exports and imports of waste is indicated by assignment of the waste to either a list of wastes subject to the Green control procedures or a list of wastes subject to the Amber control procedures and by the national procedures of the United States, as defined in Subsection R315-262-80(a). The OECD Green and Amber lists are incorporated by reference in Subsection R315-262-89(d).

(1) Listed wastes subject to the Green control procedures.

(i) Green wastes that are not considered hazardous under U.S. national procedures as defined in Subsection R315-262-80(a) are subject to existing controls normally applied to commercial transactions.

(ii) Green wastes that are considered hazardous under U.S. national procedures as defined in Section R315-262-80(a) are subject to the Amber control procedures set forth in Sections R315-262-80 through 89.

(2) Listed wastes subject to the Amber control procedures.

(i) Amber wastes that are considered hazardous under U.S. national procedures as defined in Subsection R315-262-80(a) are subject to the Amber control procedures set forth in Sections R315-262-80 through 89.

(ii) Amber wastes that are considered hazardous under U.S. national procedures as defined in Subsection R315-262-80(a), are subject to the Amber control procedures in the United States, even if they are imported to or exported from a designated OECD Member country listed in Subsection R315-262-58(a)(1) that does not consider the waste to be hazardous. In such an event, the responsibilities of the Amber control procedures shift as provided:

(A) For U.S. exports, the United States shall issue an acknowledgement of receipt and assume other responsibilities of the competent authority of the country of import.

(B) For U.S. imports, the U.S. recovery facility/importer and the United States shall assume the obligations associated with the Amber control procedures that normally apply to the exporter and country of export, respectively.

(iii) Amber wastes that are not considered hazardous under U.S. national procedures as defined in Subsection R315-262-80(a), but are considered hazardous by an OECD Member country are subject to the Amber control procedures in the OECD Member country that considers the waste hazardous. All responsibilities of the U.S. importer/exporter shift to the importer/exporter of the OECD Member country that considers the waste hazardous unless the parties make other arrangements through contracts. Note to Subsection R315-262-82(a)(2): Some wastes subject to the Amber control procedures are not listed or otherwise identified as hazardous under RCRA, and therefore are not subject to the Amber control procedures of Sections R315-262-80 through 89. Regardless of the status of the waste under RCRA, however, other Federal environmental statutes, e.g., the Toxic Substances Control Act, restrict certain waste imports or exports. Such restrictions continue to apply with regard to Sections R315-262-80 through 89.

(3) Procedures for mixtures of wastes.

(i) A Green waste that is mixed with one or more other Green wastes such that the resulting mixture is not considered hazardous under U.S. national procedures as defined in Subsection R315-262-80(a) shall be subject to the Green control procedures, provided the composition of this mixture does not impair its environmentally sound recovery. Note to Subsection R315-262-82(a)(3)(i): The regulated community should note that some OECD Member countries may require, by domestic law, that mixtures of different Green wastes be subject to the Amber control procedures.

(ii) A Green waste that is mixed with one or more Amber wastes, in any amount, de minimis or otherwise, or a mixture of two or more Amber wastes, such that the resulting waste mixture is considered hazardous under U.S. national procedures as defined in Subsection R315-262-80(a) are subject to the Amber control procedures, provided the composition of this mixture does not impair its environmentally sound recovery. Note to Subsection R315-262-82(a)(3)(ii): The regulated community should note that some OECD Member countries may require, by domestic law, that a mixture of a Green waste and more than a de minimis amount of an Amber waste or a mixture of two or more Amber wastes be subject to the Amber control procedures.

(4) Wastes not yet assigned to an OECD waste list are eligible for transboundary movements, as follows:

(i) If such wastes are considered hazardous under U.S. national procedures as defined in Subsection R315-262-80(a),

such wastes are subject to the Amber control procedures.

(ii) If such wastes are not considered hazardous under U.S. national procedures as defined in Subsection R315-262-80(a), such wastes are subject to the Green control procedures.

(b) General conditions applicable to transboundary movements of hazardous waste:

(1) The waste shall be destined for recovery operations at a facility that, under applicable domestic law, is operating or is authorized to operate in the importing country;

(2) The transboundary movement shall be in compliance with applicable international transport agreements; and

Note to Subsection R315-262-82(b)(2): These international agreements include, but are not limited to, the Chicago Convention (1944), ADR (1957), ADN (1970), MARPOL Convention (1973/1978), SOLAS Convention (1974), IMDG Code (1985), COTIF (1985), and RID (1985).

(3) Any transit of waste through a non-OECD Member country shall be conducted in compliance with all applicable international and national laws and regulations.

(c) Provisions relating to re-export for recovery to a third country:

(1) Re-export of wastes subject to the Amber control procedures from the United States, as the country of import, to a third country listed in Subsection R315-262-58(a)(1) may occur only after an exporter in the United States provides notification to and obtains consent from the competent authorities in the third country, the original country of export, and any transit countries. The notification shall comply with the notice and consent procedures in Section R315-262-83 for all countries concerned and the original country of export. The competent authorities of the original country of export, as well as the competent authorities of all other countries concerned have thirty days to object to the proposed movement.

(i) The thirty day period begins once the competent authorities of both the initial country of export and new country of import issue Acknowledgements of Receipt of the notification.

(ii) The transboundary movement may commence if no objection has been lodged after the thirty day period has passed or immediately after written consent is received from all relevant OECD importing and transit countries.

(2) In the case of re-export of Amber wastes to a country other than those listed in Subsection R315-262-58(a)(1), notification to and consent of the competent authorities of the original OECD Member country of export and any OECD Member countries of transit is required as specified in Subsection R315-262-82(c)(1), in addition to compliance with all international agreements and arrangements to which the first importing OECD Member country is a party and all applicable regulatory requirements for exports from the first country of import.

(d) Duty to return or re-export wastes subject to the Amber control procedures. When a transboundary movement of wastes subject to the Amber control procedures cannot be completed in accordance with the terms of the contract or the consent(s) and alternative arrangements cannot be made to recover the waste in an environmentally sound manner in the country of import, the waste shall be returned to the country of export or re-exported to a third country. The provisions of Subsection R315-262-82(c) apply to any shipments to be re-exported to a third country. The following provisions apply to shipments to be returned to the country of export as appropriate:

(1) Return from the United States to the country of export: The U.S. importer shall inform EPA at the specified address in Subsection R315-262-83(b)(1)(i) of the need to return the shipment. EPA shall then inform the competent authorities of the countries of export and transit, citing the reason(s) for returning the waste. The U.S. importer shall complete the return within ninety days from the time EPA informs the country of

export of the need to return the waste, unless informed in writing by EPA of another timeframe agreed to by the concerned Member countries. If the return shipment will cross any transit country, the return shipment may only occur after EPA provides notification to and obtains consent from the competent authority of the country of transit, and provides a copy of that consent to the U.S. importer.

(2) Return from the country of import to the United States: The U.S. exporter shall provide for the return of the hazardous waste shipment within ninety days from the time the country of import informs EPA of the need to return the waste or such other period of time as the concerned Member countries agree. The U.S. exporter shall submit an exception report to EPA in accordance with Subsection R315-262-87(b).

(e) Duty to return wastes subject to the Amber control procedures from a country of transit. When a transboundary movement of wastes subject to the Amber control procedures does not comply with the requirements of the notification and movement documents or otherwise constitutes illegal shipment, and if alternative arrangements cannot be made to recover these wastes in an environmentally sound manner, the waste shall be returned to the country of export. The following provisions apply as appropriate:

(1) Return from the United States, as country of transit, to the country of export: The U.S. transporter shall inform EPA at the specified address in Subsection R315-262-83(b)(1)(i) of the need to return the shipment. EPA shall then inform the competent authority of the country of export, citing the reason(s) for returning the waste. The U.S. transporter shall complete the return within ninety days from the time EPA informs the country of export of the need to return the waste, unless informed in writing by EPA of another timeframe agreed to by the concerned Member countries.

(2) Return from the country of transit to the United States, as country of export: The U.S. exporter shall provide for the return of the hazardous waste shipment within ninety days from the time the competent authority of the country of transit informs EPA of the need to return the waste or such other period of time as the concerned Member countries agree. The U.S. exporter shall submit an exception report to EPA in accordance with Subsection R315-262-87(b).

(f) Requirements for wastes destined for and received by R12 and R13 facilities. The transboundary movement of wastes destined for R12 and R13 operations shall comply with all Amber control procedures for notification and consent as set forth in Section R315-262-83 and for the movement document as set forth in Section R315-262-84. Additional responsibilities of R12/R13 facilities include:

(1) Indicating in the notification document the foreseen recovery facility or facilities where the subsequent R1-R11 recovery operation takes place or may take place.

(2) Within three days of the receipt of the wastes by the R12/R13 recovery facility or facilities, the facility(ies) shall return a signed copy of the movement document to the exporter and to the competent authorities of the countries of export and import. The facility(ies) shall retain the original of the movement document for three years.

(3) As soon as possible, but no later than thirty (30) days after the completion of the R12/R13 recovery operation and no later than one calendar year following the receipt of the waste, the R12 or R13 facility(ies) shall send a certificate of recovery to the foreign exporter and to the competent authority of the country of export and to the Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division (2254A), Environmental Protection Agency, 1200 Pennsylvania Avenue, NW, Washington, DC 20460, by mail, e-mail without digital signature followed by mail, or fax followed by mail.

(4) When an R12/R13 recovery facility delivers wastes for

recovery to an R1-R11 recovery facility located in the country of import, it shall obtain as soon as possible, but no later than one calendar year following delivery of the waste, a certification from the R1-R11 facility that recovery of the wastes at that facility has been completed. The R12/R13 facility shall promptly transmit the applicable certification to the competent authorities of the countries of import and export, identifying the transboundary movements to which the certification pertain.

(5) When an R12/R13 recovery facility delivers wastes for recovery to an R1-R11 recovery facility located:

(i) In the initial country of export, Amber control procedures apply, including a new notification;

(ii) In a third country other than the initial country of export, Amber control procedures apply, with the additional provision that the competent authority of the initial country of export shall also be notified of the transboundary movement.

(g) Laboratory analysis exemption. The transboundary movement of an Amber waste is exempt from the Amber control procedures if it is in certain quantities and destined for laboratory analysis to assess its physical or chemical characteristics, or to determine its suitability for recovery operations. The quantity of such waste shall be determined by the minimum quantity reasonably needed to perform the analysis in each particular case adequately, but in no case exceed twenty-five kilograms. Waste destined for laboratory analysis shall still be appropriately packaged and labeled.

R315-262-83. Transboundary Movements of Hazardous Waste for Recovery or Disposal -- Notification and Consent.

(a) Applicability. Consent shall be obtained from the competent authorities of the relevant OECD countries of import and transit prior to exporting hazardous waste destined for recovery operations subject to Sections R315-262-80 through 89. Hazardous wastes subject to the Amber control procedures are subject to the requirements of Subsection R315-262-83(b); and wastes not identified on any list are subject to the requirements of Subsection R315-262-83(c).

(b) Amber wastes. Exports of hazardous wastes from the United States as described in Subsection R315-262-80(a) that are subject to the Amber control procedures are prohibited unless the notification and consent requirements of Subsections R315-262-83(b)(1) or (b)(2) are met.

(1) Transactions requiring specific consent:

(i) Notification. At least forty-five days prior to commencement of each transboundary movement, the exporter shall provide written notification in English of the proposed transboundary movement to the Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division (2254A), Environmental Protection Agency, 1200 Pennsylvania Avenue, NW., Washington, DC 20460, with the words "Attention: OECD Export Notification" prominently displayed on the envelope. This notification shall include all of the information identified in Subsection R315-262-83(d). In cases where wastes having similar physical and chemical characteristics, the same United Nations classification, the same RCRA waste codes, and are to be sent periodically to the same recovery facility by the same exporter, the exporter may submit one general notification of intent to export these wastes in multiple shipments during a period of up to one year. Even when a general notification is used for multiple shipments, each shipment still shall be accompanied by its own movement document pursuant to Section R315-262-84.

(ii) Tacit consent. If no objection has been lodged by any countries concerned; i.e., exporting, importing, or transit; to a notification provided pursuant to Subsection R315-262-83(b)(1)(i) within thirty days after the date of issuance of the Acknowledgement of Receipt of notification by the competent authority of the country of import, the transboundary movement

may commence. Tacit consent expires one calendar year after the close of the thirty day period; renotification and renewal of all consents is required for exports after that date.

(iii) Written consent. If the competent authorities of all the relevant OECD importing and transit countries provide written consent in a period less than thirty days, the transboundary movement may commence immediately after all necessary consents are received. Written consent expires for each relevant OECD importing and transit country one calendar year after the date of that country's consent unless otherwise specified; renotification and renewal of each expired consent is required for exports after that date.

(2) Transboundary movements to facilities pre-approved by the competent authorities of the importing countries to accept specific wastes for recovery:

(i) Notification. The exporter shall provide EPA a notification that contains all the information identified in Subsection R315-262-83(d) in English, at least ten days in advance of commencing shipment to a pre-approved facility. The notification shall indicate that the recovery facility is pre-approved, and may apply to a single specific shipment or to multiple shipments as described in Subsection R315-262-83(b)(1)(i). This information shall be sent to the Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division (2254A), Environmental Protection Agency, 1200 Pennsylvania Avenue, NW., Washington, DC 20460, with the words "OECD Export Notification-Pre-approved Facility" prominently displayed on the envelope. General notifications that cover multiple shipments as described in Subsection R315-262-83(b)(1)(i) may cover a period of up to three years. Even when a general notification is used for multiple shipments, each shipment still shall be accompanied by its own movement document pursuant to Section R315-262-84.

(ii) Exports to pre-approved facilities may take place after the elapse of seven working days from the issuance of an Acknowledgement of Receipt of the notification by the competent authority of the country of import unless the exporter has received information indicating that the competent authority of any countries concerned objects to the shipment.

(c) Wastes not covered in the OECD Green and Amber lists. Wastes destined for recovery operations, that have not been assigned to the OECD Green and Amber lists, incorporated by reference in Subsection R315-262-89(d), but which are considered hazardous under U.S. national procedures as defined in Subsection R315-262-80(a), are subject to the notification and consent requirements established for the Amber control procedures in accordance with Subsection R315-262-83(b). Wastes destined for recovery operations, that have not been assigned to the OECD Green and Amber lists incorporated by reference in Subsection R315-262-89(d), and are not considered hazardous under U.S. national procedures as defined by Subsection R315-262-80(a) are subject to the Green control procedures.

(d) Notifications submitted under Section R315-262-83 shall include the information specified in Subsections R315-262-83(d)(1) through (d)(14):

(1) Serial number or other accepted identifier of the notification document;

(2) Exporter name and EPA identification number, if applicable, address, telephone, fax numbers, and e-mail address;

(3) Importing recovery facility name, address, telephone, fax numbers, e-mail address, and technologies employed;

(4) Importer name, if not the owner or operator of the recovery facility, address, telephone, fax numbers, and e-mail address; whether the importer will engage in waste exchange recovery operation R12 or waste accumulation recovery operation R13 prior to delivering the waste to the final recovery facility and identification of recovery operations to be employed

at the final recovery facility;

(5) Intended transporter(s) and/or their agent(s); address, telephone, fax, and e-mail address;

(6) Country of export and relevant competent authority, and point of departure;

(7) Countries of transit and relevant competent authorities and points of entry and departure;

(8) Country of import and relevant competent authority, and point of entry;

(9) Statement of whether the notification is a single notification or a general notification. If general, include period of validity requested;

(10) Date(s) foreseen for commencement of transboundary movement(s);

(11) Means of transport envisaged;

(12) Designation of waste type(s) from the appropriate OECD list incorporated by reference in Subsection R315-262-89(d), description(s) of each waste type, estimated total quantity of each, RCRA waste code, and the United Nations number for each waste type;

(13) Specification of the recovery operation(s) as defined in Section R315-262-81.

(14) Certification/Declaration signed by the exporter that states:

I certify that the above information is complete and correct to the best of my knowledge. I also certify that legally-enforceable written contractual obligations have been entered into, and that any applicable insurance or other financial guarantees are or shall be in force covering the transboundary movement.

Name:

Signature:

Date:

Note to Subsection R315-262-83(d)(14): The United States does not currently require financial assurance for these waste shipments. However, U.S. exporters may be asked by other governments to provide and certify to such assurance as a condition of obtaining consent to a proposed movement.

(e) Certificate of Recovery. As soon as possible, but no later than thirty days after the completion of recovery and no later than one calendar year following receipt of the waste, the U.S. recovery facility shall send a certificate of recovery to the exporter and to the competent authorities of the countries of export and import by mail, e-mail without a digital signature followed by mail, or fax followed by mail. The certificate of recovery shall include a signed, written and dated statement that affirms that the waste materials were recovered in the manner agreed to by the parties to the contract required under Section R315-262-85.

R315-262-84. Transboundary Movements of Hazardous Waste for Recovery or Disposal -- Movement Document.

(a) All U.S. parties subject to the contract provisions of Section R315-262-85 shall ensure that a movement document meeting the conditions of Subsection R315-262-84(b) accompanies each transboundary movement of wastes subject to the Amber control procedures from the initiation of the shipment until it reaches the final recovery facility, including cases in which the waste is stored and/or sorted by the importer prior to shipment to the final recovery facility, except as provided in Subsections R315-262-84(a)(1) and (2).

(1) For shipments of hazardous waste within the United States solely by water, bulk shipments only, the generator shall forward the movement document with the manifest to the last water, bulk shipment, transporter to handle the waste in the United States if exported by water, in accordance with the manifest routing procedures at Subsection R315-262-23(c).

(2) For rail shipments of hazardous waste within the United States which originate at the site of generation, the

generator shall forward the movement document with the manifest, in accordance with the routing procedures for the manifest in Subsection R315-262-23(d), to the next non-rail transporter, if any, or the last rail transporter to handle the waste in the United States if exported by rail.

(b) The movement document shall include all information required under Section R315-262-83, for notification, as well as the following Subsection R315-262-84(b)(1) through (b)(7):

(1) Date movement commenced;

(2) Name; if not exporter, address; telephone; fax numbers; and e-mail of primary exporter;

(3) Company name and EPA ID number of all transporters;

(4) Identification; license, registered name or registration number; of means of transport, including types of packaging envisaged;

(5) Any special precautions to be taken by transporter(s);

(6) Certification/declaration signed by the exporter that no objection to the shipment has been lodged, as follows:

I certify that the above information is complete and correct to the best of my knowledge. I also certify that legally-enforceable written contractual obligations have been entered into, that any applicable insurance or other financial guarantees are or shall be in force covering the transboundary movement, and that:

1. All necessary consents have been received; or

2. The shipment is directed to a recovery facility within the OECD area and no objection has been received from any of the countries concerned within the thirty day tacit consent period; or

3. The shipment is directed to a recovery facility pre-approved for that type of waste within the OECD area; such an authorization has not been revoked, and no objection has been received from any of the countries concerned.

Delete sentences that are not applicable

Name:

Signature:

Date:

(7) Appropriate signatures for each custody transfer, e.g., transporter, importer, and owner or operator of the recovery facility.

(c) Exporters also shall comply with the special manifest requirements of Subsections R315-262-54(a), (b), (c), (e), and (i) and importers shall comply with the import requirements of Section R315-262-60.

(d) Each U.S. person that has physical custody of the waste from the time the movement commences until it arrives at the recovery facility shall sign the movement document; e.g., transporter, importer, and owner or operator of the recovery facility.

(e) Within three working days of the receipt of imports subject to Sections R315-262-80 through 89, the owner or operator of the U.S. recovery facility shall send signed copies of the movement document to the exporter, to the Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division (2254A), Environmental Protection Agency, 1200 Pennsylvania Avenue, NW., Washington, DC 20460, and to the competent authorities of the countries of export and transit. If the concerned U.S. recovery facility is a R12/R13 recovery facility as defined under Section R315-262-81, the facility shall retain the original of the movement document for three years.

R315-262-85. Contracts.

(a) Transboundary movements of hazardous wastes subject to the Amber control procedures are prohibited unless they occur under the terms of a valid written contract, chain of contracts, or equivalent arrangements, when the movement occurs between parties controlled by the same corporate or legal

entity. Such contracts or equivalent arrangements shall be executed by the exporter and the owner or operator of the recovery facility, and shall specify responsibilities for each. Contracts or equivalent arrangements are valid for the purposes of Section R315-262-85 only if persons assuming obligations under the contracts or equivalent arrangements have appropriate legal status to conduct the operations specified in the contract or equivalent arrangements.

(b) Contracts or equivalent arrangements shall specify the name and EPA ID number, where available, of Subsections R315-262-85(b)(1) through (b)(4):

- (1) The generator of each type of waste;
- (2) Each person who will have physical custody of the wastes;
- (3) Each person who will have legal control of the wastes; and
- (4) The recovery facility.

(c) Contracts or equivalent arrangements shall specify which party to the contract will assume responsibility for alternate management of the wastes if their disposition cannot be carried out as described in the notification of intent to export. In such cases, contracts shall specify that:

- (1) The person having actual possession or physical control over the wastes will immediately inform the exporter and the competent authorities of the countries of export and import and, if the wastes are located in a country of transit, the competent authorities of that country; and
- (2) The person specified in the contract will assume responsibility for the adequate management of the wastes in compliance with applicable laws and regulations including, if necessary, arranging the return of wastes and, as the case may be, shall provide the notification for re-export.

(d) Contracts shall specify that the importer will provide the notification required in Subsection R315-262-82(c) prior to the re-export of controlled wastes to a third country.

(e) Contracts or equivalent arrangements shall include provisions for financial guarantees, if required by the competent authorities of any countries concerned, in accordance with applicable national or international law requirements.

Note to Subsection R315-262-85(e): Financial guarantees so required are intended to provide for alternate recycling, disposal or other means of sound management of the wastes in cases where arrangements for the shipment and the recovery operations cannot be carried out as foreseen. The United States does not require such financial guarantees at this time; however, some OECD Member countries do. It is the responsibility of the exporter to ascertain and comply with such requirements; in some cases, transporters or importers may refuse to enter into the necessary contracts absent specific references or certifications to financial guarantees.

(f) Contracts or equivalent arrangements shall contain provisions requiring each contracting party to comply with all applicable requirements of Sections R315-262-80 through 89.

(g) Upon request by EPA, U.S. exporters, importers, or recovery facilities shall submit to EPA copies of contracts, chain of contracts, or equivalent arrangements, when the movement occurs between parties controlled by the same corporate or legal entity. Information contained in the contracts or equivalent arrangements for which a claim of confidentiality is asserted in accordance with 40 CFR 2.203(b) shall be treated as confidential and shall be disclosed by EPA only as provided in 40 CFR 260.2.

Note to Subsection R315-262-85(g): Although the United States does not require routine submission of contracts at this time, the OECD Decision allows Member countries to impose such requirements. When other OECD Member countries require submission of partial or complete copies of the contract as a condition to granting consent to proposed movements, EPA shall request the required information; absent submission of

such information, some OECD Member countries may deny consent for the proposed movement.

R315-262-86. Provisions Relating to Recognized Traders.

(a) A recognized trader who takes physical custody of a waste and conducts recovery operations, including storage prior to recovery, is acting as the owner or operator of a recovery facility and shall be so authorized in accordance with all applicable Federal laws.

(b) A recognized trader acting as an exporter or importer for transboundary shipments of waste shall comply with all the requirements of Sections R315-262-80 through 89 associated with being an exporter or importer.

R315-262-87. Reporting and Recordkeeping.

(a) Annual reports. For all waste movements subject to Sections R315-262-80 through 89, persons, e.g., exporters, recognized traders, who meet the definition of primary exporter in Section R315-262-51 or who initiate the movement documentation under Section R315-262-84 shall file an annual report with the Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division (2254A), Environmental Protection Agency, 1200 Pennsylvania Avenue, NW., Washington, DC 20460, no later than March 1 of each year summarizing the types, quantities, frequency, and ultimate destination of all such hazardous waste exported during the previous calendar year. If the primary exporter or the person who initiates the movement document under Section R315-262-84 is required to file an annual report for waste exports that are not covered under Sections R315-262-80 through 89, he may include all export information in one report provided the following information on exports of waste destined for recovery within the designated OECD Member countries is contained in a separate section. Such reports shall include all of the following Sections R315-262-87(a)(1) through (a)(6) specified as follows:

- (1) The EPA identification number, name, and mailing and site address of the exporter filing the report;
- (2) The calendar year covered by the report;
- (3) The name and site address of each final recovery facility;
- (4) By final recovery facility, for each hazardous waste exported, a description of the hazardous waste, the EPA hazardous waste number, from Sections R315-261-20 through 24 or R315-262-30 through 35, designation of waste type(s) and applicable waste code(s) from the appropriate OECD waste list incorporated by reference in Subsection R315-262-89(d), DOT hazard class, the name and U.S. EPA identification number, where applicable, for each transporter used, the total amount of hazardous waste shipped pursuant to Sections R315-262-80 through 89, and number of shipments pursuant to each notification;

(5) In even numbered years, for each hazardous waste exported, except for hazardous waste produced by exporters of greater than 100kg but less than 1,000kg in a calendar month, and except for hazardous waste for which information was already provided pursuant to Section R315-262-41:

- (i) A description of the efforts undertaken during the year to reduce the volume and toxicity of the waste generated; and
- (ii) A description of the changes in volume and toxicity of the waste actually achieved during the year in comparison to previous years to the extent such information is available for years prior to 1984; and

(6) A certification signed by the person acting as primary exporter or initiator of the movement document under Section R315-262-84 that states:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this

and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

(b) Exception reports. Any person who meets the definition of primary exporter in Section R315-262-51 or who initiates the movement document under Section R315-262-84 shall file an exception report in lieu of the requirements of Section R315-262-42, if applicable, with the Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division (2254A), Environmental Protection Agency, 1200 Pennsylvania Avenue, NW., Washington, DC 20460, if any of the following occurs:

(1) He has not received a copy of the RCRA hazardous waste manifest, if applicable, signed by the transporter identifying the point of departure of the waste from the United States, within forty-five days from the date it was accepted by the initial transporter;

(2) Within ninety days from the date the waste was accepted by the initial transporter, the exporter has not received written confirmation from the recovery facility that the hazardous waste was received;

(3) The waste is returned to the United States.

(c) Recordkeeping.

(1) Persons who meet the definition of primary exporter in Section R315-262-51 or who initiate the movement document under Section R315-262-84 shall keep the following records in Subsections R315-262-87(c)(1)(i) through (c)(1)(iv):

(i) A copy of each notification of intent to export and all written consents obtained from the competent authorities of countries concerned for a period of at least three years from the date the hazardous waste was accepted by the initial transporter;

(ii) A copy of each annual report for a period of at least three years from the due date of the report;

(iii) A copy of any exception reports and a copy of each confirmation of delivery, i.e., movement document, sent by the recovery facility to the exporter for at least three years from the date the hazardous waste was accepted by the initial transporter or received by the recovery facility, whichever is applicable; and

(iv) A copy of each certificate of recovery sent by the recovery facility to the exporter for at least three years from the date that the recovery facility completed processing the waste shipment.

(2) The periods of retention referred to in Section R315-262-87 are extended automatically during the course of any unresolved enforcement action regarding the regulated activity or as requested by the Administrator.

R315-262-89. OECD Waste Lists.

(a) General. For the purposes of Sections R315-262-80 through 89, a waste is considered hazardous under U.S. national procedures, and hence subject to Sections R315-262-80 through 89, if the waste:

(1) Meets the Federal definition of hazardous waste in Section R315-261-3; and

(2) Is subject to either Sections R315-262-20 through 25 and 27, the universal waste management standards of Rule R315-273, the export requirements in the spent lead-acid battery management standards of Section R315-266-80.

(b) If a waste is hazardous under Subsection R315-262-89(a), it is subject to the Amber control procedures, regardless of whether it appears in Appendix 4 of the OECD Decision, as defined in Section R315-262-81.

(c) The appropriate control procedures for hazardous wastes and hazardous waste mixtures are addressed in Section R315-262-82.

(d) The OECD waste lists, as set forth in Annex B ("Green List") and Annex C ("Amber List") (collectively "OECD waste lists") of the 2009 "Guidance Manual for the Implementation of Council Decision C(2001)107/FINAL, as Amended, on the Control of Transboundary Movements of Wastes Destined for Recovery Operations," are incorporated by reference. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. This material is incorporated as it exists on the date of the approval and a notice of any change in these materials shall be published in the Federal Register. The materials are available for inspection at: the U.S. Environmental Protection Agency, Docket Center Public Reading Room, EPA West, Room 3334, 1301 Constitution Avenue NW., Washington, DC 20004 (Docket # EPA-HQ-RCRA-2005-0018) or at the National Archives and Records Administration (NARA), and may be obtained from the Organization for Economic Cooperation and Development, Environment Directorate, 2 rue André Pascal, F-75775 Paris Cedex 16, France. For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>. To contact the EPA Docket Center Public Reading Room, call (202) 566-1744. To contact the OECD, call +33 (0) 1 45 24 81 67.

R315-262-200. Alternative Requirements for Hazardous Waste Determination and Accumulation of Unwanted Material for Laboratories Owned by Eligible Academic Entities -- Definitions for Sections R315-262-200 through R315-262-216.

(a) The following definitions apply to Sections R315-262-200 through 216:

(1) "College/University" means a private or public, post-secondary, degree-granting, academic institution, that is accredited by an accrediting agency listed annually by the U.S. Department of Education.

(2) "Eligible academic entity" means a college or university, or a non-profit research institute that is owned by or has a formal written affiliation agreement with a college or university, or a teaching hospital that is owned by or has a formal written affiliation agreement with a college or university.

(3) "Formal written affiliation agreement for a non-profit research institute" means a written document that establishes a relationship between institutions for the purposes of research and/or education and is signed by authorized representatives, as defined by Section R315-260-10, from each institution. A relationship on a project-by-project or grant-by-grant basis is not considered a formal written affiliation agreement. A formal written affiliation agreement for a teaching hospital means a master affiliation agreement and program letter of agreement, as defined by the Accreditation Council for Graduate Medical Education, with an accredited medical program or medical school.

(4) Laboratory means an area owned by an eligible academic entity where relatively small quantities of chemicals and other substances are used on a non-production basis for teaching or research, or diagnostic purposes at a teaching hospital, and are stored and used in containers that are easily manipulated by one person. Photo laboratories, art studios, and field laboratories are considered laboratories. Areas such as chemical stockrooms and preparatory laboratories that provide a support function to teaching or research laboratories, or diagnostic laboratories at teaching hospitals, are also considered laboratories.

(5) "Laboratory clean-out" means an evaluation of the inventory of chemicals and other materials in a laboratory that are no longer needed or that have expired and the subsequent removal of those chemicals or other unwanted materials from the laboratory. A clean-out may occur for several reasons. It

may be on a routine basis, e.g., at the end of a semester or academic year, or as a result of a renovation, relocation, or change in laboratory supervisor/occupant. A regularly scheduled removal of unwanted material as required by Section R315-262-208 does not qualify as a laboratory clean-out.

(6) "Laboratory worker" means a person who handles chemicals and/or unwanted material in a laboratory and may include, but is not limited to, faculty, staff, post-doctoral fellows, interns, researchers, technicians, supervisors/managers, and principal investigators. A person does not need to be paid or otherwise compensated for his/her work in the laboratory to be considered a laboratory worker. Undergraduate and graduate students in a supervised classroom setting are not laboratory workers.

(7) "Non-profit research institute" means an organization that conducts research as its primary function and files as a non-profit organization under the tax code of 26 U.S.C. 501(c)(3).

(8) "Reactive acutely hazardous unwanted material" means an unwanted material that is one of the acutely hazardous commercial chemical products listed in Subsection R315-261-33(e) for reactivity.

(9) "Teaching hospital" means a hospital that trains students to become physicians, nurses or other health or laboratory personnel.

(10) "Trained professional" means a person who has completed the applicable RCRA training requirements of 40 CFR 265.16, which is incorporated by reference in Section R315-265-1, for large quantity generators, or is knowledgeable about normal operations and emergencies in accordance with Subsection R315-262-17 for small quantity generators and very small quantity generators. A trained professional may be an employee of the eligible academic entity or may be a contractor or vendor who meets the requisite training requirements.

(11) "Unwanted material" means any chemical, mixtures of chemicals, products of experiments or other material from a laboratory that is no longer needed, wanted or usable in the laboratory and that is destined for hazardous waste determination by a trained professional. Unwanted materials include reactive acutely hazardous unwanted materials and materials that may eventually be determined not to be solid waste pursuant to Section R315-261-2, or a hazardous waste pursuant to Section R315-261-3. If an eligible academic entity elects to use another equally effective term in lieu of "unwanted material," as allowed by Subsection R315-262-206(a)(1)(i), the equally effective term has the same meaning and is subject to the same requirements as "unwanted material" under Section R315-262-200 through 216.

(12) "Working container" means a small container, i.e., two gallons or less, that is in use at a laboratory bench, hood, or other work station, to collect unwanted material from a laboratory experiment or procedure.

R315-262-201. Alternative Requirements for Hazardous Waste Determination and Accumulation of Unwanted Material for Laboratories Owned by Eligible Academic Entities -- Applicability of Sections R315-262-200 through R315-262-216.

(a) Large quantity generators and small quantity generators. Sections R315-262-200 through R315-262-216 provides alternative requirements to the requirements in Sections R315-262-11 and R315-262-15 for the hazardous waste determination and accumulation of hazardous waste in laboratories owned by eligible academic entities that choose to be subject to Sections R315-262-200 through R315-262-216, provided that they complete the notification requirements of Section R315-262-203.

(b) Very small quantity generators. Sections R315-262-200 through R315-262-216 provide alternative requirements to the conditional exemption in Section R315-262-14 for the

accumulation of hazardous waste in laboratories owned by eligible academic entities that choose to be subject to Sections R315-262-200 through R315-262-216, provided that they complete the notification requirements of Section R315-262-203.

R315-262-202. Alternative Requirements for Hazardous Waste Determination and Accumulation of Unwanted Material for Laboratories Owned by Eligible Academic Entities -- Sections R315-262-200 through R315-262-216 are Optional.

(a) Large quantity generators and small quantity generators. Eligible academic entities have the option of complying with Sections R315-262-200 through R315-262-216 with respect to its laboratories, as an alternative to complying with the requirements of Section R315-262-11 and Section R315-262-15.

(b) Very small quantity generators. Eligible academic entities have the option of complying with Sections R315-262-200 through 216 with respect to laboratories, as an alternative to complying with the conditional exemption of Section R315-262-14.

R315-262-203. Alternative Requirements for Hazardous Waste Determination and Accumulation of Unwanted Material for Laboratories Owned by Eligible Academic Entities -- How an Eligible Academic Entity Indicates it will be Subject to the Requirements of Sections R315-262-200 through R315-262-216.

(a) An eligible academic entity shall notify the Director in writing, using the RCRA Subtitle C Site Identification Form, EPA Form 8700-12, that it is electing to be subject to the requirements of Sections R315-262-200 through R315-262-216 for all the laboratories owned by the eligible academic entity under the same EPA Identification Number. An eligible academic entity that is a very small quantity generator and does not have an EPA Identification Number shall notify that it is electing to be subject to the requirements of Sections R315-262-200 through R315-262-216 for all the laboratories owned by the eligible academic entity that are on-site, as defined by Section R315-260-10. An eligible academic entity shall submit a separate notification, Site Identification Form, for each EPA Identification Number, or site, for very small quantity generators, that is electing to be subject to the requirements of Sections R315-262-200 through R315-262-216, and shall submit the Site Identification Form before it begins operating under Sections R315-262-200 through R315-262-216.

(b) When submitting the Site Identification Form, the eligible academic entity shall, at a minimum, fill out the following fields on the form:

- (1) Reason for Submittal.
- (2) Site EPA Identification Number, except for very small quantity generators.
- (3) Site Name.
- (4) Site Location Information.
- (5) Site Land Type.
- (6) North American Industry Classification System (NAICS) Code(s) for the Site.
- (7) Site Mailing Address.
- (8) Site Contact Person.
- (9) Operator and Legal Owner of the Site.
- (10) Type of Regulated Waste Activity.
- (11) Certification.

(c) An eligible academic entity shall keep a copy of the notification on file at the eligible academic entity for as long as its laboratories are subject to Sections R315-262-200 through R315-262-216.

(d) A teaching hospital that is not owned by a college or university shall keep a copy of its formal written affiliation

agreement with a college or university on file at the teaching hospital for as long as its laboratories are subject to Sections R315-262-200 through R315-262-216.

(e) A non-profit research institute that is not owned by a college or university shall keep a copy of its formal written affiliation agreement with a college or university on file at the non-profit research institute for as long as its laboratories are subject to Sections R315-262-200 through R315-262-216.

R315-262-204. Alternative Requirements for Hazardous Waste Determination and Accumulation of Unwanted Material for Laboratories Owned by Eligible Academic Entities - How an Eligible Academic Entity Indicates It Will Withdraw from the Requirements of Sections R315-262-200 Through 216.

(a) An eligible academic entity shall notify the Director in writing, using the RCRA Subtitle C Site Identification Form (EPA Form 8700-12), that it is electing to no longer be subject to the requirements of Sections R315-262-200 through R315-262-216 for all the laboratories owned by the eligible academic entity under the same EPA Identification Number and that it will comply with the requirements of Sections R315-262-11 and R315-262-15 for small quantity generators and large quantity generators. An eligible academic entity that is a very small quantity generator and does not have an EPA Identification Number shall notify that it is withdrawing from the requirements of Sections R315-262-200 through R315-262-216 for all the laboratories owned by the eligible academic entity that are on-site and that it will comply with the conditional exemption in Section R315-262-14. An eligible academic entity shall submit a separate notification, Site Identification Form, for each EPA Identification Number, or site, for very small quantity generators, that is withdrawing from the requirements of Sections R315-262-200 through R315-262-216 and shall submit the Site Identification Form before it begins operating under the requirements of Sections R315-262-11 and R315-262-15 for small quantity generators and large quantity generators, or Section R315-262-14 for very small quantity generators.

(b) When submitting the Site Identification Form, the eligible academic entity shall, at a minimum, fill out the following fields on the form:

- (1) Reason for Submittal.
- (2) Site EPA Identification Number, except for very small quantity generators.
- (3) Site Name.
- (4) Site Location Information.
- (5) Site Land Type.
- (6) North American Industry Classification System (NAICS) Code(s) for the Site.
- (7) Site Mailing Address.
- (8) Site Contact Person.
- (9) Operator and Legal Owner of the Site.
- (10) Type of Regulated Waste Activity.
- (11) Certification.

(c) An eligible academic entity shall keep a copy of the withdrawal notice on file at the eligible academic entity for three years from the date of the notification.

R315-262-205. Alternative Requirements for Hazardous Waste Determination and Accumulation of Unwanted Material for Laboratories Owned by Eligible Academic Entities Summary of the Requirements of Sections R315-262-200 through R315-262-216.

An eligible academic entity that chooses to be subject to Sections R315-262-200 through 216 is not required to have interim status or a RCRA Part B permit for the accumulation of unwanted material and hazardous waste in its laboratories, provided the laboratories comply with the provisions of Sections R315-262-200 through 216 and the eligible academic entity has

a Laboratory Management Plan (LMP) in accordance with Section R315-262-214 that describes how the laboratories owned by the eligible academic entity will comply with the requirements of Sections R315-262-200 through 216.

R315-262-206. Alternative Requirements for Hazardous Waste Determination and Accumulation of Unwanted Material for Laboratories Owned by Eligible Academic Entities -- Labeling and Management Standards for Containers of Unwanted Material in the Laboratory.

An eligible academic entity shall manage containers of unwanted material while in the laboratory in accordance with the requirements in Section R315-262-206.

(a) Labeling: Label unwanted material as follows:
(1) The following information shall be affixed or attached to the container:

(i) The words "unwanted material" or another equally effective term that is to be used consistently by the eligible academic entity and that is identified in Part I of the Laboratory Management Plan, and

(ii) Sufficient information to alert emergency responders to the contents of the container. Examples of information that would be sufficient to alert emergency responders to the contents of the container include, but are not limited to:

- (A) The name of the chemical(s),
- (B) The type or class of chemical, such as organic solvents or halogenated organic solvents.

(2) The following information may be affixed or attached to the container, but shall at a minimum be associated with the container:

(i) The date that the unwanted material first began accumulating in the container, and

(ii) Information sufficient to allow a trained professional to properly identify whether an unwanted material is a solid and hazardous waste and to assign the proper hazardous waste code(s), pursuant to Section R315-262-11. Examples of information that would allow a trained professional to properly identify whether an unwanted material is a solid or hazardous waste include, but are not limited to:

(A) The name and/or description of the chemical contents or composition of the unwanted material, or, if known, the product of the chemical reaction,

(B) Whether the unwanted material has been used or is unused,

(C) A description of the manner in which the chemical was produced or processed, if applicable.

(b) Management of Containers in the Laboratory. An eligible academic entity shall properly manage containers of unwanted material in the laboratory to assure safe storage of the unwanted material, to prevent leaks, spills, emissions to the air, adverse chemical reactions, and dangerous situations that may result in harm to human health or the environment. Proper container management shall include the following:

(1) Containers are maintained and kept in good condition and damaged containers are replaced, overpacked, or repaired, and

(2) Containers are compatible with their contents to avoid reactions between the contents and the container; and are made of, or lined with, material that is compatible with the unwanted material so that the container's integrity is not impaired, and

(3) Containers shall be kept closed at all times, except:

(i) When adding, removing or bulking unwanted material, or

(ii) A working container may be open until the end of the procedure or work shift, or until it is full, whichever comes first, at which time the working container shall either be closed or the contents emptied into a separate container that is then closed, or

(iii) When venting of a container is necessary:

(A) For the proper operation of laboratory equipment,

such as with in-line collection of unwanted materials from high performance liquid chromatographs; or

(B) To prevent dangerous situations, such as build-up of extreme pressure.

R315-262-207. Alternative Requirements for Hazardous Waste Determination and Accumulation of Unwanted Material for Laboratories Owned by Eligible Academic Entities -- Training.

An eligible academic entity shall provide training to all individuals working in a laboratory at the eligible academic entity, as follows:

(a) Training for laboratory workers and students shall be commensurate with their duties so they understand the requirements in Sections R315-262-200 through 216 and can implement them.

(b) An eligible academic entity can provide training for laboratory workers and students in a variety of ways, including, but not limited to:

(1) Instruction by the professor or laboratory manager before or during an experiment; or

(2) Formal classroom training; or

(3) Electronic/written training; or

(4) On-the-job training; or

(5) Written or oral exams.

(c) An eligible academic entity that is a large quantity generator shall maintain documentation for the durations specified in 40 CFR 265.16(e), which is incorporated by reference in R315-265-1, demonstrating training for all laboratory workers that is sufficient to determine whether laboratory workers have been trained. Examples of documentation demonstrating training can include, but are not limited to, the following:

(1) Sign-in/attendance sheet(s) for training session(s); or

(2) Syllabus for training session; or

(3) Certificate of training completion; or

(4) Test results.

(d) A trained professional shall:

(1) Accompany the transfer of unwanted material and hazardous waste when the unwanted material and hazardous waste is removed from the laboratory, and

(2) Make the hazardous waste determination, pursuant to Subsections R315-262-11(a) through (d), for unwanted material.

R315-262-208. Alternative Requirements for Hazardous Waste Determination and Accumulation of Unwanted Material for Laboratories Owned by Eligible Academic Entities -- Removing Containers of Unwanted Material from the Laboratory.

(a) Removing containers of unwanted material on a regular schedule. An eligible academic entity shall either:

(1) Remove all containers of unwanted material from each laboratory on a regular interval, not to exceed 12 months; or

(2) Remove containers of unwanted material from each laboratory within 12 months of each container's accumulation start date.

(b) The eligible academic entity shall specify in Part I of its Laboratory Management Plan whether it will comply with Subsection R315-262-208(a)(1) or (a)(2) for the regular removal of unwanted material from its laboratories.

(c) The eligible academic entity shall specify in Part II of its Laboratory Management Plan how it will comply with Subsection R315-262-208(a)(1) or (a)(2) and develop a schedule for regular removals of unwanted material from its laboratories.

(d) Removing containers of unwanted material when volumes are exceeded.

(1) If a laboratory accumulates a total volume of unwanted material, including reactive acutely hazardous unwanted

material, in excess of 55 gallons before the regularly scheduled removal, the eligible academic entity shall ensure that all containers of unwanted material in the laboratory, including reactive acutely hazardous unwanted material:

(i) Are marked on the label that is associated with the container, or on the label that is affixed or attached to the container, if that is preferred, with the date that 55 gallons is exceeded; and

(ii) Are removed from the laboratory within 10 calendar days of the date that 55 gallons was exceeded, or at the next regularly scheduled removal, whichever comes first.

(2) If a laboratory accumulates more than 1 quart of liquid reactive acutely hazardous unwanted material or more than 1 kg (2.2 pounds) of solid reactive acutely hazardous unwanted material before the regularly scheduled removal, then the eligible academic entity shall ensure that all containers of reactive acutely hazardous unwanted material:

(i) Are marked on the label that is associated with the container, or on the label that is affixed or attached to the container, if that is preferred, with the date that 1 quart or 1 kg is exceeded; and

(ii) Are removed from the laboratory within 10 calendar days of the date that 1 quart or 1 kg was exceeded, or at the next regularly scheduled removal, whichever comes first.

R315-262-209. Alternative Requirements for Hazardous Waste Determination and Accumulation of Unwanted Material for Laboratories Owned by Eligible Academic Entities -- Where and When to Make the Hazardous Waste Determination and Where to Send Containers of Unwanted Material Upon Removal from the Laboratory.

(a) Large quantity generators and small quantity generators--an eligible academic entity shall ensure that a trained professional makes a hazardous waste determination, pursuant to Section R315-262-11, for unwanted material in any of the following areas:

(1) In the laboratory before the unwanted material is removed from the laboratory, in accordance with Section R315-262-210;

(2) Within 4 calendar days of arriving at an on-site central accumulation area, in accordance with Section R315-262-211; and

(3) Within 4 calendar days of arriving at an on-site interim status or permitted treatment, storage or disposal facility, in accordance with Section R315-262-212.

(b) Very small quantity generators--An eligible academic entity shall ensure that a trained professional makes a hazardous waste determination, pursuant to Subsections R315-262-11(a) through (d), for unwanted material in the laboratory before the unwanted material is removed from the laboratory, in accordance with Section R315-262-210.

R315-262-210. Alternative Requirements for Hazardous Waste Determination and Accumulation of Unwanted Material for Laboratories Owned by Eligible Academic Entities -- Making the Hazardous Waste Determination in the Laboratory Before the Unwanted Material is Removed from the Laboratory.

If an eligible academic entity makes the hazardous waste determination, pursuant to Section R315-262-11, for unwanted material in the laboratory, it shall comply with the following:

(a) A trained professional shall make the hazardous waste determination, pursuant to Subsections R315-262-11(a) through (d), before the unwanted material is removed from the laboratory.

(b) If an unwanted material is a hazardous waste, the eligible academic entity shall:

(1) Write the words "hazardous waste" on the container label that is affixed or attached to the container, before the

hazardous waste may be removed from the laboratory; and

(2) Write the appropriate hazardous waste code(s) on the label that is associated with the container, or on the label that is affixed or attached to the container, if that is preferred, before the hazardous waste is transported off-site.

(3) Count the hazardous waste toward the eligible academic entity's generator status, pursuant to Section R315-262-13, in the calendar month that the hazardous waste determination was made.

(c) A trained professional shall accompany all hazardous waste that is transferred from the laboratory(ies) to an on-site central accumulation area or on-site interim status or permitted treatment, storage or disposal facility.

(d) When hazardous waste is removed from the laboratory:

(1) Large quantity generators and small quantity generators shall ensure it is taken directly from the laboratory(ies) to an on-site central accumulation area, or on-site interim status or permitted treatment, storage or disposal facility, or transported off-site.

(2) Very small quantity generators shall ensure it is taken directly from the laboratory(ies) to any of the types of facilities listed in Section R315-262-14.

(e) An unwanted material that is a hazardous waste is subject to all applicable hazardous waste regulations when it is removed from the laboratory.

R315-262-211. Alternative Requirements for Hazardous Waste Determination and Accumulation of Unwanted Material for Laboratories Owned by Eligible Academic Entities - Making the Hazardous Waste Determination at an On-Site Central Accumulation Area.

If an eligible academic entity makes the hazardous waste determination, pursuant to Section R315-262-11, for unwanted material at an on-site central accumulation area, it shall comply with the following:

(a) A trained professional shall accompany all unwanted material that is transferred from the laboratory(ies) to an on-site central accumulation area.

(b) All unwanted material removed from the laboratory(ies) shall be taken directly from the laboratory(ies) to the on-site central accumulation area.

(c) The unwanted material becomes subject to the generator accumulation regulations of Section R315-262-16 for small quantity generators or Section R315-262-17 for large quantity generators as soon as it arrives in the central accumulation area, except for the "hazardous waste" labeling conditions of Subsections R315-262-16(b)(6) and 17(a)(5).

(d) A trained professional shall determine, pursuant to Subsections R315-262-11(a) through (d), if the unwanted material is a hazardous waste within 4 calendar days of the unwanted materials' arrival at the on-site central accumulation area.

(e) If the unwanted material is a hazardous waste, the eligible academic entity shall:

(1) Write the words "hazardous waste" on the container label that is affixed or attached to the container, within 4 calendar days of arriving at the on-site central accumulation area and before the hazardous waste may be removed from the on-site central accumulation area, and

(2) Write the appropriate hazardous waste code(s) on the container label that is associated with the container, or on the label that is affixed or attached to the container, if that is preferred, before the hazardous waste may be treated or disposed of on-site or transported off-site, and

(3) Count the hazardous waste toward the eligible academic entity's generator category, pursuant to Section R315-262-13 in the calendar month that the hazardous waste determination was made, and

(4) Manage the hazardous waste according to all

applicable hazardous waste regulations.

R315-262-212. Alternative Requirements for Hazardous Waste Determination and Accumulation of Unwanted Material for Laboratories Owned by Eligible Academic Entities -- Making the Hazardous Waste Determination at an On-Site Interim Status or Permitted Treatment, Storage or Disposal Facility.

If an eligible academic entity makes the hazardous waste determination, pursuant to Section R315-262-11, for unwanted material at an on-site interim status or permitted treatment, storage or disposal facility, it shall comply with the following:

(a) A trained professional shall accompany all unwanted material that is transferred from the laboratory(ies) to an on-site interim status or permitted treatment, storage or disposal facility.

(b) All unwanted material removed from the laboratory(ies) shall be taken directly from the laboratory(ies) to the on-site interim status or permitted treatment, storage or disposal facility.

(c) The unwanted material becomes subject to the terms of the eligible academic entity's hazardous waste permit or interim status as soon as it arrives in the on-site treatment, storage or disposal facility.

(d) A trained professional shall determine, pursuant to Subsections R315-262-11(a) through (d), if the unwanted material is a hazardous waste within 4 calendar days of the unwanted materials' arrival at an on-site interim status or permitted treatment, storage or disposal facility.

(e) If the unwanted material is a hazardous waste, the eligible academic entity shall:

(1) Write the words "hazardous waste" on the container label that is affixed or attached to the container within 4 calendar days of arriving at the on-site interim status or permitted treatment, storage or disposal facility and before the hazardous waste may be removed from the on-site interim status or permitted treatment, storage or disposal facility, and

(2) Write the appropriate hazardous waste code(s) on the container label that is associated with the container, or on the label that is affixed or attached to the container, if that is preferred, before the hazardous waste may be treated or disposed on-site or transported off-site, and

(3) Count the hazardous waste toward the eligible academic entity's generator status, pursuant to Subsections R315-261-5(c) and (d) in the calendar month that the hazardous waste determination was made, and

(4) Manage the hazardous waste according to all applicable hazardous waste regulations.

R315-262-213. Alternative Requirements for Hazardous Waste Determination and Accumulation of Unwanted Material for Laboratories Owned by Eligible Academic Entities -- Laboratory Clean-outs.

(a) One time per 12 month period for each laboratory, an eligible academic entity may opt to conduct a laboratory clean-out that is subject to all the applicable requirements of Sections R315-262-200 through 216, except that:

(1) If the volume of unwanted material in the laboratory exceeds 55 gallons, or 1 quart of liquid reactive acutely hazardous unwanted material or 1 kg of solid reactive acutely hazardous unwanted material, the eligible academic entity is not required to remove all unwanted materials from the laboratory within 10 calendar days of exceeding 55 gallons, or 1 quart of liquid reactive acutely hazardous unwanted material or 1 kg of solid reactive acutely hazardous unwanted material, as required by Section R315-262-208. Instead, the eligible academic entity shall remove all unwanted materials from the laboratory within 30 calendar days from the start of the laboratory clean-out; and

(2) For the purposes of on-site accumulation, an eligible academic entity is not required to count a hazardous waste that

is an unused commercial chemical product, listed in Sections R315-261-30 through R315-261-35 or exhibiting one or more characteristics in Sections R315-261-20 through R315-261-24, generated solely during the laboratory clean-out toward its hazardous waste generator category, pursuant to Section R315-262-13. An unwanted material that is generated prior to the beginning of the laboratory clean-out and is still in the laboratory at the time the laboratory clean-out commences shall be counted toward hazardous waste generator category, pursuant to Section R315-262-13, if it is determined to be hazardous waste; and

(3) For the purposes of off-site management, an eligible academic entity shall count all its hazardous waste, regardless of whether the hazardous waste was counted toward generator category under Subsection R315-262-213(a)(2), and if it generates more than 1 kg per month of acute hazardous waste or more than 100 kg per month of non-acute hazardous waste, i.e., the very small quantity generator limits as defined in Section R315-260-10, the hazardous waste is subject to all applicable hazardous waste regulations when it is transported off site; and

(4) An eligible academic entity shall document the activities of the laboratory clean-out. The documentation shall, at a minimum, identify the laboratory being cleaned out, the date the laboratory clean-out begins and ends, and the volume of hazardous waste generated during the laboratory clean-out. The eligible academic entity shall maintain the records for a period of three years from the date the clean-out ends; and

(b) For all other laboratory clean-outs conducted during the same 12-month period, an eligible academic entity is subject to all the applicable requirements of Sections R315-262-200 through 216, including, but not limited to:

(1) The requirement to remove all unwanted materials from the laboratory within 10 calendar days of exceeding 55 gallons, or 1 quart of reactive acutely hazardous unwanted material, as required by Section R315-262-208; and

(2) The requirement to count all hazardous waste, including unused hazardous waste, generated during the laboratory clean-out toward its hazardous waste generator category, pursuant to Section R315-262-13.

R315-262-214. Alternative Requirements for Hazardous Waste Determination and Accumulation of Unwanted Material for Laboratories Owned by Eligible Academic Entities Laboratory Management Plan.

An eligible academic entity shall develop and retain a written Laboratory Management Plan, or revise an existing written plan. The Laboratory Management Plan is a site-specific document that describes how the eligible academic entity will manage unwanted materials in compliance with Sections R315-262-200 through 216. An eligible academic entity may write one Laboratory Management Plan for all the laboratories owned by the eligible academic entity that have opted into Sections R315-262-200 through 216, even if the laboratories are located at sites with different EPA Identification Numbers. The Laboratory Management Plan shall contain two parts with a total of nine elements identified in Subsections R315-262-214(a) and (b). In Part I of its Laboratory Management Plan, an eligible academic entity shall describe its procedures for each of the elements listed in Subsection R315-262-214(a). An eligible academic entity shall implement and comply with the specific provisions that it develops to address the elements in Part I of the Laboratory Management Plan. In Part II of its Laboratory Management Plan, an eligible academic entity shall describe its best management practices for each of the elements listed in Subsection R315-262-214(b). The specific actions taken by an eligible academic entity to implement each element in Part II of its Laboratory Management Plan may vary from the procedures described in the eligible academic entity's Laboratory Management Plan, without constituting a violation of Sections

R315-262-200 through 216. An eligible academic entity may include additional elements and best management practices in Part II of its Laboratory Management Plan if it chooses.

(a) The eligible academic entity shall implement and comply with the specific provisions of Part I of its Laboratory Management Plan. In Part I of its Laboratory Management Plan, an eligible academic entity shall:

(1) Describe procedures for container labeling in accordance with Subsection R315-262-206(a), as follows:

(i) Identifying whether the eligible academic entity will use the term "unwanted material" on the containers in the laboratory. If not, identify an equally effective term that will be used in lieu of "unwanted material" and consistently by the eligible academic entity. The equally effective term, if used, has the same meaning and is subject to the same requirements as "unwanted material."

(ii) Identifying the manner in which information that is "associated with the container" will be imparted.

(2) Identify whether the eligible academic entity will comply with Subsection R315-262-208(a)(1) or (a)(2) for regularly scheduled removals of unwanted material from the laboratory.

(b) In Part II of its Laboratory Management Plan, an eligible academic entity shall:

(1) Describe its intended best practices for container labeling and management, see the required standards at Section R315-262-206.

(2) Describe its intended best practices for providing training for laboratory workers and students commensurate with their duties, see the required standards at Subsection R315-262-207(a).

(3) Describe its intended best practices for providing training to ensure safe on-site transfers of unwanted material and hazardous waste by trained professionals, see the required standards at Subsection R315-262-207(d)(1).

(4) Describe its intended best practices for removing unwanted material from the laboratory, including:

(i) For regularly scheduled removals-Develop a regular schedule for identifying and removing unwanted materials from its laboratories, see the required standards at Subsections R315-262-208(a)(1) and (a)(2).

(ii) For removals when maximum volumes are exceeded:
(A) Describe its intended best practices for removing unwanted materials from the laboratory within 10 calendar days when unwanted materials have exceeded their maximum volumes, see the required standards at Subsection R315-262-208(d).

(B) Describe its intended best practices for communicating that unwanted materials have exceeded their maximum volumes.

(5) Describe its intended best practices for making hazardous waste determinations, including specifying the duties of the individuals involved in the process, see the required standards at Subsections R315-262-11(a) through (d) and Sections R315-262-209 through R315-262-212.

(6) Describe its intended best practices for laboratory clean-outs, if the eligible academic entity plans to use the incentives for laboratory clean-outs provided in Section R315-262-213, including:

(i) Procedures for conducting laboratory clean-outs, see the required standards at Subsections R315-262-213(a)(1) through (3); and

(ii) Procedures for documenting laboratory clean-outs, see the required standards at Subsection R315-262-213(a)(4).

(7) Describe its intended best practices for emergency prevention, including:

(i) Procedures for emergency prevention, notification, and response, appropriate to the hazards in the laboratory; and

(ii) A list of chemicals that the eligible academic entity has, or is likely to have, that become more dangerous when they

exceed their expiration date and/or as they degrade; and

(iii) Procedures to safely dispose of chemicals that become more dangerous when they exceed their expiration date and/or as they degrade; and

(iv) Procedures for the timely characterization of unknown chemicals.

(c) An eligible academic entity shall make its Laboratory Management Plan available to laboratory workers, students, or any others at the eligible academic entity who request it.

(d) An eligible academic entity shall review and revise its Laboratory Management Plan, as needed.

R315-262-215. Alternative Requirements for Hazardous Waste Determination and Accumulation of Unwanted Material for Laboratories Owned by Eligible Academic Entities -- Unwanted Material that Is Not Solid or Hazardous Waste.

(a) If an unwanted material does not meet the definition of solid waste in Section R315-261-2, it is no longer subject to Sections R315-262-200 through 216 or to Rules R315-260 through 266, 268, or 270.

(b) If an unwanted material does not meet the definition of hazardous waste in Section R315-261-3, it is no longer subject to Sections R315-262-200 through 216 or to Rules R315-260 through 266, 268, or 270, but shall be managed in compliance with any other applicable regulations and/or conditions.

R315-262-216. Alternative Requirements for Hazardous Waste Determination and Accumulation of Unwanted Material for Laboratories Owned by Eligible Academic Entities -- Non-Laboratory Hazardous Waste Generated at an Eligible Academic Entity.

An eligible academic entity that generates hazardous waste outside of a laboratory is not eligible to manage that hazardous waste under Sections R315-262-200 through 216; and

(a) Remains subject to the generator requirements of Sections R315-262-11 and R315-262-15 for large quantity generators and small quantity generators, if the hazardous waste is managed in a satellite accumulation area, and all other applicable generator requirements of Rule R315-262, with respect to that hazardous waste; or

(b) Remains subject to the conditional exemption of Section R315-262-14 for very small quantity generators, with respect to that hazardous waste.

R315-262-217. Appendix to Rule R315-262 -- Uniform Hazardous Waste Manifest and Instructions (EPA Forms 8700-22 and 8700-22A and Their Instructions)

U.S. EPA Forms 8700-22 and Manifest Continuation Sheet (EPA Form 8700-22A) found in appendix to 40 CFR 262, 2015 edition, are incorporated and incorporated by reference.

Read all instructions before completing this form.

1. This form has been designed for use on a 12-pitch (elite) typewriter which is also compatible with standard computer printers; a firm point pen may also be used - press down hard.

2. Federal regulations require generators and transporters of hazardous waste and owners or operators of hazardous waste treatment, storage, and disposal facilities to complete this form (FORM 8700-22) and, if necessary, the continuation sheet (FORM 8700-22A) for both inter- and intrastate transportation of hazardous waste.

Manifest 8700-22

The following statement shall be included with each Uniform Hazardous Waste Manifest, either on the form, in the instructions to the form, or accompanying the form:

Public reporting burden for this collection of information is estimated to average: 30 minutes for generators, 10 minutes for transporters, and 25 minutes for owners or operators of treatment, storage, and disposal facilities. This includes time for

reviewing instructions, gathering data, completing, reviewing and transmitting the form. Any correspondence regarding the PRA burden statement for the manifest shall be sent to the Director of the Collection Strategies Division in EPA's Office of Information Collection at the following address: U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW., Washington, DC 20460. Do not send the completed form to this address.

I. Instructions for Generators

Manifest 8700-22

The following statement shall be included with each Uniform Hazardous Waste Manifest, either on the form, in the instructions to the form, or accompanying the form:

Public reporting burden for this collection of information is estimated to average: 30 minutes for generators, 10 minutes for transporters, and 25 minutes for owners or operators of treatment, storage, and disposal facilities. This includes time for reviewing instructions, gathering data, completing, reviewing and transmitting the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to: Chief, Information Policy Branch (2136), U.S. Environmental Protection Agency, Ariel Rios Building; 1200 Pennsylvania Ave., NW., Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

Item 1. Generator's U.S. EPA Identification Number

Enter the generator's U.S. EPA twelve digit identification number, or the State generator identification number if the generator site does not have an EPA identification number.

Item 2. Page 1 of _

Enter the total number of pages used to complete this Manifest (i.e., the first page (EPA Form 8700-22) plus the number of Continuation Sheets (EPA Form 8700-22A), if any).

Item 3. Emergency Response Phone Number

Enter a phone number for which emergency response information can be obtained in the event of an incident during transportation. The emergency response phone number shall:

1. Be the number of the generator or the number of an agency or organization who is capable of and accepts responsibility for providing detailed information about the shipment;

2. Reach a phone that is monitored 24 hours a day at all times the waste is in transportation (including transportation related storage); and

3. Reach someone who is either knowledgeable of the hazardous waste being shipped and has comprehensive emergency response and spill cleanup/incident mitigation information for the material being shipped or has immediate access to a person who has that knowledge and information about the shipment.

Note: Emergency Response phone number information should only be entered in Item 3 when there is one phone number that applies to all the waste materials described in Item 9b. If a situation (e.g., consolidated shipments) arises where more than one Emergency Response phone number applies to the various wastes listed on the manifest, the phone numbers associated with each specific material should be entered after its description in Item 9b.

Item 4. Manifest Tracking Number

This unique tracking number shall be pre-printed on the manifest by the forms printer.

Item 5. Generator's Mailing Address, Phone Number and Site Address

Enter the name of the generator, the mailing address to which the completed manifest signed by the designated facility should be mailed, and the generator's telephone number. Note, the telephone number (including area code) should be the normal business number for the generator, or the number where the generator or his authorized agent may be reached to provide

instructions in the event the designated and/or alternate (if any) facility rejects some or all of the shipment. Also enter the physical site address from which the shipment originates only if this address is different than the mailing address.

Item 6. Transporter 1 Company Name, and U.S. EPA ID Number

Enter the company name and U.S. EPA ID number of the first transporter who will transport the waste. Vehicle or driver information may not be entered here.

Item 7. Transporter 2 Company Name and U.S. EPA ID Number

If applicable, enter the company name and U.S. EPA ID number of the second transporter who will transport the waste. Vehicle or driver information may not be entered here.

If more than two transporters are needed, use a Continuation Sheet(s) (EPA Form 8700-22A).

Item 8. Designated Facility Name, Site Address, and U.S. EPA ID Number

Enter the company name and site address of the facility designated to receive the waste listed on this manifest. Also enter the facility's phone number and the U.S. EPA twelve digit identification number of the facility.

Item 9. U.S. DOT Description (Including Proper Shipping Name, Hazard Class or Division, Identification Number, and Packing Group)

Item 9a. If the wastes identified in Item 9b consist of both hazardous and nonhazardous materials, then identify the hazardous materials by entering an "X" in this Item next to the corresponding hazardous material identified in Item 9b.

If applicable, enter the name of the person accepting the waste on behalf of the second transporter. That person shall acknowledge acceptance of the waste described on the manifest by signing and entering the date of receipt.

Item 9b. Enter the U.S. DOT Proper Shipping Name, Hazard Class or Division, Identification Number (UN/NA) and Packing Group for each waste as identified in 49 CFR 172. Include technical name(s) and reportable quantity references, if applicable.

Note: If additional space is needed for waste descriptions, enter these additional descriptions in Item 27 on the Continuation Sheet (EPA Form 8700-22A). Also, if more than one Emergency Response phone number applies to the various wastes described in either Item 9b or Item 27, enter applicable Emergency Response phone numbers immediately following the shipping descriptions for those Items.

Item 10. Containers (Number and Type)

Enter the number of containers for each waste and the appropriate abbreviation from Table I (below) for the type of container.

TABLE I

Types of Containers

- BA = Burlap, cloth, paper, or plastic bags.
- CF = Fiber or plastic boxes, cartons, cases.
- CM = Metal boxes, cartons, cases (including roll-offs).
- CW = Wooden boxes, cartons, cases.
- CY = Cylinders.
- DF = Fiberboard or plastic drums, barrels, kegs.
- DM = Metal drums, barrels, kegs.
- DT = Dump truck.
- DW = Wooden drums, barrels, kegs.
- HG = Hopper or gondola cars.
- TC = Tank cars.
- TP = Portable tanks.
- TT = Cargo tanks (tank trucks).

Item 11. Total Quantity

Enter, in designated boxes, the total quantity of waste. Round partial units to the nearest whole unit, and do not enter decimals or fractions. To the extent practical, report quantities using appropriate units of measure that will allow you to report

quantities with precision. Waste quantities entered should be based on actual measurements or reasonably accurate estimates of actual quantities shipped. Container capacities are not acceptable as estimates.

Item 12. Units of Measure (Weight/Volume)

Enter, in designated boxes, the appropriate abbreviation from Table II (below) for the unit of measure.

TABLE II

Units of Measure

- G = Gallons (liquids only).
- K = Kilograms.
- L = Liters (liquids only).
- M = Metric Tons (1000 kilograms).
- N = Cubic Meters.
- P = Pounds.
- T = Tons (2000 pounds).
- Y = Cubic Yards.

Note: Tons, Metric Tons, Cubic Meters, and Cubic Yards should only be reported in connection with very large bulk shipments, such as rail cars, tank trucks, or barges.

Item 13. Waste Codes

Enter up to six federal and state waste codes to describe each waste stream identified in Item 9b. State waste codes that are not redundant with federal codes shall be entered here, in addition to the federal waste codes which are most representative of the properties of the waste.

Item 14. Special Handling Instructions and Additional Information.

1. Generators may enter any special handling or shipment-specific information necessary for the proper management or tracking of the materials under the generator's or other handler's business processes, such as waste profile numbers, container codes, bar codes, or response guide numbers. Generators also may use this space to enter additional descriptive information about their shipped materials, such as chemical names, constituent percentages, physical state, or specific gravity of wastes identified with volume units in Item 12.

2. This space may be used to record limited types of federally required information for which there is no specific space provided on the manifest, including any alternate facility designations; the manifest tracking number of the original manifest for rejected wastes and residues that are re-shipped under a second manifest; and the specification of PCB waste descriptions and PCB out-of-service dates required under 40 CFR 761.207. Generators, however, cannot be required to enter information in this space to meet state regulatory requirements.

Item 15. Generator's/Officer's Certifications

1. The generator shall read, sign, and date the waste minimization certification statement. In signing the waste minimization certification statement, those generators who have not been exempted by statute or regulation from the duty to make a waste minimization certification under section 3002(b) of RCRA are also certifying that they have complied with the waste minimization requirements. The Generator's Certification also contains the required attestation that the shipment has been properly prepared and is in proper condition for transportation (the shipper's certification). The content of the shipper's certification statement is as follows: "I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked, and labeled/placarded, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent." When a party other than the generator prepares the shipment for transportation, this party may also sign the shipper's certification

statement as the offeror of the shipment.

2. Generator or Offeror personnel may preprint the words, "On behalf of" in the signature block or may hand write this statement in the signature block prior to signing the generator/offeror certification, to indicate that the individual signs as the employee or agent of the named principal.

Note: All of the above information except the handwritten signature required in Item 15 may be pre-printed.

II. Instructions for International Shipment Block

Item 16. International Shipments

For export shipments, the primary exporter shall check the export box, and enter the point of exit (city and state) from the United States. For import shipments, the importer shall check the import box and enter the point of entry (city and state) into the United States.

III. Instructions for Transporters

Item 17. Transporters' Acknowledgments of Receipt

Enter the name of the person accepting the waste on behalf of the first transporter. That person shall acknowledge acceptance of the waste described on the manifest by signing and entering the date of receipt. Only one signature per transportation company is required. Signatures are not required to track the movement of wastes in and out of transfer facilities, unless there is a change of custody between transporters.

If applicable, enter the name of the person accepting the waste on behalf of the second transporter. That person shall acknowledge acceptance of the waste described on the manifest by signing and entering the date of receipt.

Note: Transporters carrying imports, who are acting as importers, may have responsibilities to enter information in the International Shipments Block. Transporters carrying exports may also have responsibilities to enter information in the International Shipments Block. See above instructions for Item 16.

IV. Instructions for Owners and Operators of Treatment, Storage, and Disposal Facilities

Item 18. Discrepancy

Item 18a. Discrepancy Indication Space

1. The authorized representative of the designated (or alternate) facility's owner or operator shall note in this space any discrepancies between the waste described on the Manifest and the waste actually received at the facility. Manifest discrepancies are: significant differences (as defined by Subsections R315-264-72(b) and 40 CFR 265.72(b)), which is incorporated by reference in Section R315-265-1, between the quantity or type of hazardous waste designated on the manifest or shipping paper, and the quantity and type of hazardous waste a facility actually receives, rejected wastes, which may be a full or partial shipment of hazardous waste that the TSDF cannot accept, or container residues, which are residues that exceed the quantity limits for "empty" containers set forth in Subsection R315-261-7(b).

2. For rejected loads and residues (Subsections R315-264-72(d), (e), and (f), or CFR 265.72(d), (e), or (f)), which are incorporated by reference in Section R315-265-1, check the appropriate box if the shipment is a rejected load (i.e., rejected by the designated and/or alternate facility and is sent to an alternate facility or returned to the generator) or a regulated residue that cannot be removed from a container. Enter the reason for the rejection or the inability to remove the residue and a description of the waste. Also, reference the manifest tracking number for any additional manifests being used to track the rejected waste or residue shipment on the original manifest. Indicate the original manifest tracking number in Item 14, the Special Handling Block and Additional Information Block of the additional manifests.

3. Owners or operators of facilities located in unauthorized States (i.e., states in which the U.S. EPA administers the hazardous waste management program) who cannot resolve

significant differences in quantity or type within 15 days of receiving the waste shall submit to their Regional Administrator a letter with a copy of the Manifest at issue describing the discrepancy and attempts to reconcile it (Subsections R315-264-72(c) and CFR 265.72(c), which is incorporated by reference in Section R315-265-1).

4. Owners or operators of facilities located in authorized States (i.e., those States that have received authorization from the U.S. EPA to administer the hazardous waste management program) should contact their State agency for information on where to report discrepancies involving "significant differences" to state officials.

Item 18b. Alternate Facility (or Generator) for Receipt of Full Load Rejections

Enter the name, address, phone number, and EPA Identification Number of the Alternate Facility which the rejecting TSDF has designated, after consulting with the generator, to receive a fully rejected waste shipment. In the event that a fully rejected shipment is being returned to the generator, the rejecting TSDF may enter the generator's site information in this space. This field is not to be used to forward partially rejected loads or residue waste shipments.

Item 18c. Alternate Facility (or Generator) Signature

The authorized representative of the alternate facility (or the generator in the event of a returned shipment) shall sign and date this field of the form to acknowledge receipt of the fully rejected wastes or residues identified by the initial TSDF.

Item 19. Hazardous Waste Report Management Method Codes

Enter the most appropriate Hazardous Waste Report Management Method code for each waste listed in Item 9. The Hazardous Waste Report Management Method code is to be entered by the first treatment, storage, or disposal facility (TSDF) that receives the waste and is the code that best describes the way in which the waste is to be managed when received by the TSDF.

Item 20. Designated Facility Owner or Operator Certification of Receipt (Except As Noted in Item 18a)

Enter the name of the person receiving the waste on behalf of the owner or operator of the facility. That person shall acknowledge receipt or rejection of the waste described on the Manifest by signing and entering the date of receipt or rejection where indicated. Since the Facility Certification acknowledges receipt of the waste except as noted in the Discrepancy Space in Item 18a, the certification should be signed for both waste receipt and waste rejection, with the rejection being noted and described in the space provided in Item 18a. Fully rejected wastes may be forwarded or returned using Item 18b after consultation with the generator. Enter the name of the person accepting the waste on behalf of the owner or operator of the alternate facility or the original generator. That person shall acknowledge receipt or rejection of the waste described on the Manifest by signing and entering the date they received or rejected the waste in Item 18c. Partially rejected wastes and residues shall be re-shipped under a new manifest, to be initiated and signed by the rejecting TSDF as offeror of the shipment.

Instructions -- Continuation Sheet, U.S. EPA Form 8700-22A

Read all instructions before completing this form. This form has been designed for use on a 12-pitch (elite) typewriter; a firm point pen may also be used---press down hard.

This form shall be used as a continuation sheet to U.S. EPA Form 8700-22 if:

More than two transporters are to be used to transport the waste; or

More space is required for the U.S. DOT descriptions and related information in Item 9 of U.S. EPA Form 8700-22.

Federal regulations require generators and transporters of

hazardous waste and owners or operators of hazardous waste treatment, storage, or disposal facilities to use the uniform hazardous waste manifest (EPA Form 8700-22) and, if necessary, this continuation sheet (EPA Form 8700-22A) for both interstate and intrastate transportation.

Item 21. Generator's ID Number

Enter the generator's U.S. EPA twelve digit identification number or, the State generator identification number if the generator site does not have an EPA identification number.

Item 22. Page ---

Enter the page number of this Continuation Sheet.

Item 23. Manifest Tracking Number

Enter the Manifest Tracking number from Item 4 of the Manifest form to which this continuation sheet is attached.

Item 24. Generator's Name---

Enter the generator's name as it appears in Item 5 on the first page of the Manifest.

Item 25. Transporter---Company Name

If additional transporters are used to transport the waste described on this Manifest, enter the company name of each additional transporter in the order in which they will transport the waste. Enter after the word "Transporter" the order of the transporter. For example, Transporter 3 Company Name. Also enter the U.S. EPA twelve digit identification number of the transporter described in Item 25.

Item 26. Transporter---Company Name

If additional transporters are used to transport the waste described on this Manifest, enter the company name of each additional transporter in the order in which they will transport the waste. Enter after the word "Transporter" the order of the transporter. For example, Transporter 4 Company Name. Each Continuation Sheet can record the names of two additional transporters. Also enter the U.S. EPA twelve digit identification number of the transporter named in Item 26.

Item 27. U.S. D.O.T. Description Including Proper Shipping Name, Hazardous Class, and ID Number (UN/NA)

For each row enter a sequential number under Item 27b that corresponds to the order of waste codes from one continuation sheet to the next, to reflect the total number of wastes being shipped. Refer to instructions for Item 9 of the manifest for the information to be entered.

Item 28. Containers (No. And Type)

Refer to the instructions for Item 10 of the manifest for information to be entered.

Item 29. Total Quantity

Refer to the instructions for Item 11 of the manifest form.

Item 30. Units of Measure (Weight/Volume)

Refer to the instructions for Item 12 of the manifest form.

Item 31. Waste Codes

Refer to the instructions for Item 13 of the manifest form.

Item 32. Special Handling Instructions and Additional Information

Refer to the instructions for Item 14 of the manifest form.

Transporters

Item 33. Transporter - Acknowledgment of Receipt of Materials

Enter the same number of the Transporter as identified in Item 25. Enter also the name of the person accepting the waste on behalf of the Transporter (Company Name) identified in Item 25. That person shall acknowledge acceptance of the waste described on the Manifest by signing and entering the date of receipt.

Item 34. Transporter - Acknowledgment of Receipt of Materials

Enter the same number of the Transporter as identified in Item 26. Enter also the name of the person accepting the waste on behalf of the Transporter (Company Name) identified in Item 26. That person shall acknowledge acceptance of the waste described on the Manifest by signing and entering the date of

receipt.

Owner and Operators of Treatment, Storage, or Disposal Facilities

Item 35. Discrepancy Indication Space

Refer to Item 18. This space may be used to more fully describe information on discrepancies identified in Item 18a of the manifest form.

Item 36. Hazardous Waste Report Management Method Codes

For each field here, enter the sequential number that corresponds to the waste materials described under Item 27, and enter the appropriate process code that describes how the materials will be processed when received. If additional continuation sheets are attached, continue numbering the waste materials and process code fields sequentially, and enter on each sheet the process codes corresponding to the waste materials identified on that sheet.

R315-262-230. Alternative Standards for Episodic Generation -- Applicability.

Sections R315-262-230 through 233 are applicable to very small quantity generators and small quantity generators as defined in Section R315-260-10.

R315-262-231. Alternative Standards for Episodic Generation -- Definitions for Sections R315-262-230 Through 233.

(a) "Episodic event" means an activity or activities, either planned or unplanned, that does not normally occur during generator operations, resulting in an increase in the generation of hazardous wastes that exceeds the calendar month quantity limits for the generator's usual category.

(b) "Planned episodic event" means an episodic event that the generator planned and prepared for, including regular maintenance, tank cleanouts, short-term projects, and removal of excess chemical inventory

(c) "Unplanned episodic event" means an episodic event that the generator did not plan or reasonably did not expect to occur, including production process upsets, product recalls, accidental spills, or "acts of nature," such as tornado, hurricane, or flood.

R315-262-232. Alternative Standards for Episodic Generation -- Conditions for a Generator Managing Hazardous Waste from an Episodic Event.

(a) Very small quantity generator. A very small quantity generator may maintain its existing generator category for hazardous waste generated during an episodic event provided that the generator complies with the following conditions:

(1) The very small quantity generator is limited to one episodic event per calendar year, unless a petition is granted under Section R315-262-233;

(2) Notification. The very small quantity generator shall notify the Director no later than thirty (30) calendar days prior to initiating a planned episodic event using EPA Form 8700-12. In the event of an unplanned episodic event, the generator shall notify the Director within 72 hours of the unplanned event via phone, email, or fax and subsequently submit EPA Form 8700-12. The generator shall include the start date and end date of the episodic event, the reason(s) for the event, types and estimated quantities of hazardous waste expected to be generated as a result of the episodic event, and shall identify a facility contact and emergency coordinator with 24-hour telephone access to discuss the notification submittal or respond to an emergency in compliance with Subsection R315-262-16(b)(9)(i);

(3) EPA ID Number. The very small quantity generator shall have an EPA identification number or obtain an EPA identification number using EPA Form 8700-12;

(4) Accumulation. A very small quantity generator is prohibited from accumulating hazardous waste generated from an episodic event on drip pads and in containment buildings. When accumulating hazardous waste in containers and tanks the following conditions apply:

(i) Containers. A very small quantity generator accumulating in containers shall mark or label its containers with the following:

(A) The words "Episodic Hazardous Waste";

(B) An indication of the hazards of the contents, examples include:

(I) the applicable hazardous waste characteristic(s), i.e., ignitable, corrosive, reactive, toxic;

(II) hazard communication consistent with the Department of Transportation requirements at 49 CFR part 172 subpart E, labeling, or subpart F, placarding;

(III) a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at 29 CFR 1910.1200; or

(IV) a chemical hazard label consistent with the National Fire Protection Association code 704; and

(C) The date upon which the episodic event began, clearly visible for inspection on each container.

(ii) Tanks. A very small quantity generator accumulating episodic hazardous waste in tanks shall do the following:

(A) Mark or label the tank with the words "Episodic Hazardous Waste";

(B) Mark or label its tanks with an indication of the hazards of the contents, examples include, but are not limited to:

(I) the applicable hazardous waste characteristic(s), i.e., ignitable, corrosive, reactive, toxic;

(II) hazard communication consistent with the Department of Transportation requirements at 49 CFR part 172 subpart E, labeling, or subpart F, placarding;

(III) a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at 29 CFR 1910.1200; or

(IV) a chemical hazard label consistent with the National Fire Protection Association code 704;

(C) Use inventory logs, monitoring equipment or other records to identify the date upon which each episodic event begins; and

(D) Keep inventory logs or records with the above information on site and readily available for inspection.

(iii) Hazardous waste shall be managed in a manner that minimizes the possibility of a fire, explosion, or release of hazardous waste or hazardous waste constituents to the air, soil, or water;

(A) Containers shall be in good condition and compatible with the hazardous waste being accumulated therein. Containers shall be kept closed except to add or remove waste; and

(B) Tanks shall be in good condition and compatible with the hazardous waste accumulated therein. Tanks shall have procedures in place to prevent the overflow (e.g., be equipped with a means to stop inflow with systems such as a waste feed cutoff system or bypass system to a standby tank when hazardous waste is continuously fed into the tank). Tanks shall be inspected at least once each operating day to ensure all applicable discharge control equipment, such as waste feed cutoff systems, bypass systems, and drainage systems are in good working order and to ensure the tank is operated according to its design by reviewing the data gathered from monitoring equipment such as pressure and temperature gauges from the inspection.

(5) The very small quantity generator shall comply with the hazardous waste manifest provisions of Sections R315-262-20 through 27 when it sends its episodic event hazardous waste off site to a designated facility, as defined in Section R315-260-10.

(6) The very small quantity generator has up to sixty (60) calendar days from the start of the episodic event to manifest and send its hazardous waste generated from the episodic event to a designated facility, as defined in Section R315-260-10.

(7) Very small quantity generators shall maintain the following records for three (3) years from the end date of the episodic event:

(i) Beginning and end dates of the episodic event;

(ii) A description of the episodic event;

(iii) A description of the types and quantities of hazardous wastes generated during the event;

(iv) A description of how the hazardous waste was managed as well as the name of the designated facility that received the hazardous waste;

(v) Name(s) of hazardous waste transporters; and

(vi) An approval letter from the Director if the generator petitioned to conduct one additional episodic event per calendar year.

(b) Small quantity generators. A small quantity generator may maintain its existing generator category during an episodic event provided that the generator complies with the following conditions:

(1) The small quantity generator is limited to one episodic event per calendar year unless a petition is granted under Section R315-262-233;

(2) Notification. The small quantity generator shall notify the Director no later than thirty (30) calendar days prior to initiating a planned episodic event using EPA Form 8700-12. In the event of an unplanned episodic event, the small quantity generator shall notify the Director within 72 hours of the unplanned event via phone, email, or fax, and subsequently submit EPA Form 8700-12. The small quantity generator shall include the start date and end date of the episodic event and the reason(s) for the event, types and estimated quantities of hazardous wastes expected to be generated as a result of the episodic event, and identify a facility contact and emergency coordinator with 24-hour telephone access to discuss the notification submittal or respond to emergency;

(3) EPA ID Number. The small quantity generator shall have an EPA identification number or obtain an EPA identification number using EPA Form 8700-12; and

(4) Accumulation by small quantity generators. A small quantity generator is prohibited from accumulating hazardous wastes generated from an episodic event waste on drip pads and in containment buildings. When accumulating hazardous waste generated from an episodic event in containers and tanks, the following conditions apply:

(i) Containers. A small quantity generator accumulating episodic hazardous waste in containers shall meet the standards at Subsection R315-262-16(b)(2) and shall mark or label its containers with the following:

(A) The words "Episodic Hazardous Waste";

(B) An indication of the hazards of the contents, examples include, but are not limited to:

(I) the applicable hazardous waste characteristic(s), i.e., ignitable, corrosive, reactive, toxic;

(II) hazard communication consistent with the Department of Transportation requirements at 49 CFR part 172 subpart E, labeling, or subpart F, placarding;

(III) a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at 29 CFR 1910.1200; or

(IV) a chemical hazard label consistent with the National Fire Protection Association code 704; and

(C) The date upon which the episodic event began, clearly visible for inspection on each container.

(ii) Tanks. A small quantity generator accumulating episodic hazardous waste in tanks shall meet the standards at Subsection R315-262-16(b)(3) and shall do the following:

(A) Mark or label its tank with the words "Episodic Hazardous Waste";

(B) Mark or label its tanks with an indication of the hazards of the contents, examples include, but are not limited to:

(I) the applicable hazardous waste characteristic(s), i.e., ignitable, corrosive, reactive, toxic;

(II) hazard communication consistent with the Department of Transportation requirements at 49 CFR part 172 subpart E, labeling, or subpart F, placarding;

(III) a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at 29 CFR 1910.1200; or

(IV) a chemical hazard label consistent with the National Fire Protection Association code 704;

(C) Use inventory logs, monitoring equipment or other records to identify the date upon which each period of accumulation begins and ends; and

(D) Keep inventory logs or records with the above information on site and available for inspection.

(5) The small quantity generator shall treat hazardous waste generated from an episodic event on site or manifest and ship such hazardous waste off site to a designated facility (as defined by Section R315-260-10) within sixty (60) calendar days from the start of the episodic event.

(6) The small quantity generator shall maintain the following records for three (3) years from the end date of the episodic event:

(i) Beginning and end dates of the episodic event;

(ii) A description of the episodic event;

(iii) A description of the types and quantities of hazardous wastes generated during the event;

(iv) A description of how the hazardous waste was managed as well as the name of the designated facility (as defined by Section R315-260-10) that received the hazardous waste;

(v) Name(s) of hazardous waste transporters; and

(vi) An approval letter from the Director if the generator petitioned to conduct one additional episodic event per calendar year.

R315-262-233 Alternative Standards for Episodic Generation -- Petition to Manage One Additional Episodic Event Per Calendar Year.

(a) A generator may petition the Director for a second episodic event in a calendar year without impacting its generator category under the following conditions:

(1) If a very small quantity generator or small quantity generator has already held a planned episodic event in a calendar year, the generator may petition the Director for an additional unplanned episodic event in that calendar year within 72 hours of the unplanned event.

(2) If a very small quantity generator or small quantity generator has already held an unplanned episodic event in a calendar year, the generator may petition the Director for an additional planned episodic event in that calendar year.

(b) The petition shall include the following:

(1) The reason(s) why an additional episodic event is needed and the nature of the episodic event;

(2) The estimated amount of hazardous waste to be managed from the event;

(3) How the hazardous waste is to be managed;

(4) The estimated length of time needed to complete management of the hazardous waste generated from the episodic event - not to exceed sixty (60) days; and

(5) Information regarding the previous episodic event managed by the generator, including the nature of the event, whether it was a planned or unplanned event, and how the generator complied with the conditions.

(c) The petition shall be made to the Director in writing,

either on paper or electronically.

(d) The generator shall retain written approval in its records for three (3) years from the date the episodic event ended.

R315-262-250. Preparedness, Prevention, and Emergency Procedures for Large Quantity Generators -- Applicability.

The regulations of Sections R315-262-250 through 265 apply to those areas of a large quantity generator where hazardous waste is generated or accumulated on site.

R315-262-251. Preparedness, Prevention, and Emergency Procedures for Large Quantity Generators -- Maintenance and Operation of Facility.

A large quantity generator shall maintain and operate its facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.

R315-262-252. Preparedness, Prevention, and Emergency Procedures for Large Quantity Generators -- Required Equipment.

All areas deemed applicable by Section R315-262-250 shall be equipped with the items in Subsections R315-262-252(a) through (d) (unless none of the hazards posed by waste handled at the facility could require a particular kind of equipment specified below or the actual hazardous waste generation or accumulation area does not lend itself for safety reasons to have a particular kind of equipment specified below). A large quantity generator may determine the most appropriate locations within its facility to locate equipment necessary to prepare for and respond to emergencies:

(a) An internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel;

(b) A device, such as a telephone (immediately available at the scene of operations) or a hand-held two-way radio, capable of summoning emergency assistance from local police departments, fire departments, or state or local emergency response teams;

(c) Portable fire extinguishers, fire control equipment (including special extinguishing equipment, such as that using foam, inert gas, or dry chemicals), spill control equipment, and decontamination equipment; and

(d) Water at adequate volume and pressure to supply water hose streams, or foam producing equipment, or automatic sprinklers, or water spray systems.

R315-262-253. Preparedness, Prevention, and Emergency Procedures for Large Quantity Generators -- Testing and Maintenance of Equipment.

All communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, where required, shall be tested and maintained as necessary to assure its proper operation in time of emergency.

R315-262-254. Preparedness, Prevention, and Emergency Procedures for Large Quantity Generators -- Access to Communications or Alarm System.

(a) Whenever hazardous waste is being poured, mixed, spread, or otherwise handled, all personnel involved in the operation shall have immediate access (e.g., direct or unimpeded access) to an internal alarm or emergency communication device, either directly or through visual or voice contact with another employee, unless such a device is not required under Section R315-262-252.

(b) In the event there is just one employee on the premises while the facility is operating, the employee shall have

immediate access, e.g., direct or unimpeded access, to a device, such as a telephone, immediately available at the scene of operation, or a hand-held two-way radio, capable of summoning external emergency assistance, unless such a device is not required under Section R315-262-252.

R315-262-255. Preparedness, Prevention, and Emergency Procedures for Large Quantity Generators -- Required Aisle Space.

The large quantity generator shall maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency, unless aisle space is not needed for any of these purposes.

R315-262-256. Preparedness, Prevention, and Emergency Procedures for Large Quantity Generators -- Arrangements with Local Authorities.

(a) The large quantity generator shall attempt to make arrangements with the local police department, fire department, other emergency response teams, emergency response contractors, equipment suppliers, and local hospitals, taking into account the types and quantities of hazardous wastes handled at the facility. Arrangements may be made with the Local Emergency Planning Committee, if it is determined to be the appropriate organization with which to make arrangements.

(1) A large quantity generator attempting to make arrangements with its local fire department shall determine the potential need for the services of the local police department, other emergency response teams, emergency response contractors, equipment suppliers and local hospitals.

(2) As part of this coordination, the large quantity generator shall attempt to make arrangements, as necessary, to familiarize the above organizations with the layout of the facility, the properties of the hazardous waste handled at the facility and associated hazards, places where personnel would normally be working, entrances to roads inside the facility, and possible evacuation routes as well as the types of injuries or illnesses which could result from fires, explosions, or releases at the facility.

(3) Where more than one police or fire department might respond to an emergency, the large quantity generator shall attempt to make arrangements designating primary emergency authority to a specific fire or police department, and arrangements with any others to provide support to the primary emergency authority.

(b) The large quantity generator shall maintain records documenting the arrangements with the local fire department as well as any other organization necessary to respond to an emergency. This documentation shall include documentation in the operating record that either confirms such arrangements actively exist or, in cases where no arrangements exist, confirms that attempts to make such arrangements were made.

(c) A facility possessing 24-hour response capabilities may seek a waiver from the State Fire Marshal or locality as far as needing to make arrangements with the local fire department as well as any other organization necessary to respond to an emergency, provided that the waiver is documented in the operating record.

R315-262-260. Preparedness, Prevention, and Emergency Procedures for Large Quantity Generators -- Purpose and Implementation of Contingency Plan.

(a) A large quantity generator shall have a contingency plan for the facility. The contingency plan shall be designed to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water.

(b) The provisions of the plan shall be carried out immediately whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment.

R315-262-261. Preparedness, Prevention, and Emergency Procedures for Large Quantity Generators -- Content of Contingency Plan.

(a) The contingency plan shall describe the actions facility personnel shall take to comply with Sections R315-262-260 and 265 in response to fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water at the facility.

(b) If the generator has already prepared a Spill Prevention, Control, and Countermeasures (SPCC) Plan in accordance with some other emergency or contingency plan, it need only amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with the standards of Rule R315-262. The generator may develop one contingency plan that meets all regulatory standards. The plan should be based on the National Response Team's Integrated Contingency Plan Guidance, "One Plan."

(c) The plan shall describe arrangements agreed to with the local police department, fire department, other emergency response teams, emergency response contractors, equipment suppliers, local hospitals or, if applicable, the Local Emergency Planning Committee, pursuant to Section R315-262-256.

(d) The plan shall list names and emergency telephone numbers of all persons qualified to act as emergency coordinator (see Section R315-262-264), and this list shall be kept up to date. Where more than one person is listed, one shall be named as primary emergency coordinator and others shall be listed in the order in which they will assume responsibility as alternates. In situations where the generator facility has an emergency coordinator continuously on duty because it operates 24 hours per day, every day of the year, the plan may list the staffed position, e.g., operations manager, shift coordinator, shift operations supervisor, as well as an emergency telephone number that can be guaranteed to be answered at all times.

(e) The plan shall include a list of all emergency equipment at the facility, such as fire extinguishing systems, spill control equipment, communications and alarm systems, internal and external, and decontamination equipment, where this equipment is required. This list shall be kept up to date. In addition, the plan shall include the location and a physical description of each item on the list, and a brief outline of its capabilities.

(f) The plan shall include an evacuation plan for generator personnel where there is a possibility that evacuation could be necessary. This plan shall describe signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes, in cases where the primary routes could be blocked by releases of hazardous waste or fires.

R315-262-262. Preparedness, Prevention, and Emergency Procedures for Large Quantity Generators -- Copies of Contingency Plan.

A copy of the contingency plan and all revisions to the plan shall be maintained at the large quantity generator and:

(a) The large quantity generator shall submit a copy of the contingency plan and all revisions to all local emergency responders (i.e., police departments, fire departments, hospitals and State and local emergency response teams that may be called upon to provide emergency services). This document may also be submitted to the Local Emergency Planning Committee, as appropriate.

(b) A large quantity generator that first becomes subject to these provisions after May 30, 2017 or a large quantity generator that is otherwise amending its contingency plan shall

at that time submit a quick reference guide of the contingency plan to the local emergency responders identified at Subsection R315-262-262(a) or, as appropriate, the Local Emergency Planning Committee. The quick reference guide shall include the following elements:

(1) The types/names of hazardous wastes in layman's terms and the associated hazard associated with each hazardous waste present at any one time, e.g., toxic paint wastes, spent ignitable solvent, corrosive acid;

(2) The estimated maximum amount of each hazardous waste that may be present at any one time;

(3) The identification of any hazardous wastes where exposure would require unique or special treatment by medical or hospital staff;

(4) A map of the facility showing where hazardous wastes are generated, accumulated and treated and routes for accessing these wastes;

(5) A street map of the facility in relation to surrounding businesses, schools and residential areas to understand how best to get to the facility and also evacuate citizens and workers;

(6) The locations of water supply, e.g., fire hydrant and its flow rate;

(7) The identification of on-site notification systems, e.g., a fire alarm that rings off site, smoke alarms; and

(8) The name of the emergency coordinator(s) and 7/24-hour emergency telephone number(s) or, in the case of a facility where an emergency coordinator is continuously on duty, the emergency telephone number for the emergency coordinator.

(c) Generators shall update, if necessary, their quick reference guides, whenever the contingency plan is amended and submit these documents to the local emergency responders identified at Subsection R315-262-262(a) or, as appropriate, the Local Emergency Planning Committee.

R315-262-263. Preparedness, Prevention, and Emergency Procedures for Large Quantity Generators -- Amendment of Contingency Plan.

The contingency plan shall be reviewed, and immediately amended, if necessary, whenever:

(a) Applicable regulations are revised;

(b) The plan fails in an emergency;

(c) The generator facility changes--in its design, construction, operation, maintenance, or other circumstances--in a way that materially increases the potential for fires, explosions, or releases of hazardous waste or hazardous waste constituents, or changes the response necessary in an emergency;

(d) The list of emergency coordinators changes; or

(e) The list of emergency equipment changes.

R315-262-264. Preparedness, Prevention, and Emergency Procedures for Large Quantity Generators -- Emergency Coordinator.

At all times, there shall be at least one employee either on the generator's premises or on call, i.e., available to respond to an emergency by reaching the facility within a short period of time, with the responsibility for coordinating all emergency response measures and implementing the necessary emergency procedures outlined in Section R315-262-265. Although responsibilities may vary depending on factors such as type and variety of hazardous waste(s) handled by the facility, as well as type and complexity of the facility, this emergency coordinator shall be thoroughly familiar with all aspects of the generator's contingency plan, all operations and activities at the facility, the location and characteristics of hazardous waste handled, the location of all records within the facility, and the facility's layout. In addition, this person shall have the authority to commit the resources needed to carry out the contingency plan.

R315-262-265. Preparedness, Prevention, and Emergency

Procedures for Large Quantity Generators -- Emergency Procedures.

(a) Whenever there is an imminent or actual emergency situation, the emergency coordinator (or designee when the emergency coordinator is on call) shall immediately:

(1) Activate internal facility alarms or communication systems, where applicable, to notify all facility personnel; and

(2) Notify appropriate state or local agencies with designated response roles if their help is needed.

(b) Whenever there is a release, fire, or explosion, the emergency coordinator shall immediately identify the character, exact source, amount, and areal extent of any released materials. The emergency coordinator may do this by observation or review of the facility records or manifests and, if necessary, by chemical analysis.

(c) Concurrently, the emergency coordinator shall assess possible hazards to human health or the environment that may result from the release, fire, or explosion. This assessment shall consider both direct and indirect effects of the release, fire, or explosion, e.g., the effects of any toxic, irritating, or asphyxiating gases that are generated, or the effects of any hazardous surface water run-offs from water or chemical agents used to control fire and heat-induced explosions.

(d) If the emergency coordinator determines that the facility has had a release, fire, or explosion which could threaten human health, or the environment, outside the facility, the emergency coordinator shall report the findings as follows:

(1) If the assessment indicates that evacuation of local areas may be advisable, the emergency coordinator shall immediately notify appropriate local authorities. The emergency coordinator shall be available to help appropriate officials decide whether local areas should be evacuated; and

(2) The emergency coordinator shall immediately notify either the government official designated as the on-scene coordinator for that geographical area, or the National Response Center, using their 24-hour toll free number 800-424-8802, and the Division of Waste Management and Radiation Control at 801-536-0200 or after hours at 801-536-4123. The report shall include:

(i) Name and telephone number of reporter;

(ii) Name and address of the generator;

(iii) Time and type of incident (e.g., release, fire);

(iv) Name and quantity of material(s) involved, to the extent known;

(v) The extent of injuries, if any; and

(vi) The possible hazards to human health, or the environment, outside the facility.

(e) During an emergency, the emergency coordinator shall take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other hazardous waste at the generator's facility. These measures shall include, where applicable, stopping processes and operations, collecting and containing released hazardous waste, and removing or isolating containers.

(f) If the generator stops operations in response to a fire, explosion or release, the emergency coordinator shall monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, wherever this is appropriate.

(g) Immediately after an emergency, the emergency coordinator shall provide for treating, storing, or disposing of recovered waste, contaminated soil or surface water, or any other material that results from a release, fire, or explosion at the facility. Unless the generator can demonstrate, in accordance with Subsections R315-261-3(c) or (d), that the recovered material is not a hazardous waste, then it is a newly generated hazardous waste that shall be managed in accordance with all the applicable requirements and conditions for exemption in Rules R315-262, 263, and 265.

(h) The emergency coordinator shall ensure that, in the

affected area(s) of the facility:

(1) No hazardous waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed; and

(2) All emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.

(i) The generator shall note in the operating record the time, date, and details of any incident that requires implementing the contingency plan. Within 15 days after the incident, the generator shall submit a written report on the incident to the Director. The report shall include:

(I) Name, address, and telephone number of the generator;

(II) Date, time, and type of incident, e.g., fire, explosion;

(III) Name and quantity of material(s) involved;

(IV) The extent of injuries, if any;

(V) An assessment of actual or potential hazards to human health or the environment, where this is applicable; and

(VI) Estimated quantity and disposition of recovered material that resulted from the incident.

KEY: hazardous waste, generators
August 31, 2017

19-6-105

19-6-106

R315. Environmental Quality, Waste Management and Radiation Control, Waste Management.

R315-263. Standards Applicable to Transporters of Hazardous Waste and Standards Applicable to Emergency Control of Spills for All Hazardous Waste Handlers.

R315-263-10. Scope.

(a) Sections R315-263-11, 12, 20, 21, 22, 25, and 34 establish standards which apply to persons transporting hazardous waste within Utah if the transportation requires a manifest under Rule R315-262.

(b) Sections R315-263-11, 12, 20, 21, 22, 25, and 34 do not apply to on-site transportation of hazardous waste by generators or by owners or operators of permitted hazardous waste management facilities.

(c) A transporter of hazardous waste shall also comply with Rule R315-262 if he:

(1) Transports hazardous waste into Utah; or

(2) Mixes hazardous wastes of different DOT shipping descriptions by placing them into a single container.

(d) A transporter of hazardous waste subject to the manifesting requirements of Rule R315-262, or subject to the waste management standards of Rule R315-273, that is being imported from or exported to any of the countries listed in Subsection R315-262-58(a)(1) for purposes of recovery is subject to Sections R315-263-10 through 12 and to all other relevant requirements of Sections R315-262-80 through 89, including, but not limited to, Section R315-262-84 for movement documents.

(e) Reserved

(f) Reserved

(g) Sections R315-263-30, 31, 32, and 33 apply to all handlers of hazardous waste or material that when spilled may become a hazardous waste.

R315-263-11. EPA Identification Number.

(a) A transporter shall not transport hazardous wastes without having received an EPA identification number from the Director.

(b) A transporter who has not received an EPA identification number may obtain one by applying to the Director using EPA Form 8700-12. Upon receiving the request, the Director shall assign an EPA identification number to the transporter.

R315-263-12. Transfer Facility Requirements.

(a) A transporter who stores manifested shipments of hazardous waste in containers meeting the independent requirements of Section R315-262-30 at a transfer facility for a period of ten (10) days or less is not subject to regulation under Rules R315-264, 265, 268, and 270 with respect to the storage of those wastes.

(b) When consolidating the contents of two or more containers with the same hazardous waste into a new container, or when combining and consolidating two different hazardous wastes that are compatible with each other, the transporter must mark its containers of 119 gallons or less with the following information:

(1) The words "Hazardous Waste" and

(2) The applicable EPA hazardous waste number(s), EPA hazardous waste codes, in Sections R315-261-20 through 24 and 30 through 35, or in compliance with Section R315-262-32(c).

R315-263-20. The Manifest System.

(a)(1) Manifest requirement. A transporter may not accept hazardous waste from a generator unless the transporter is also provided with a manifest form; EPA Form 8700-22, and if necessary, EPA Form 8700-22A; signed in accordance with the requirement of Section R315-262-23, or is provided with an

electronic manifest that is obtained, completed, and transmitted in accordance with Subsection R315-262-20(a)(3), and signed with a valid and enforceable electronic signature as described in Section R315-262-25.

(2) Exports. In the case of exports other than those subject to Sections R315-262-80 through 89, a transporter may not accept such waste from a primary exporter or other person if he knows the shipment does not conform to the EPA Acknowledgment of Consent; and unless, in addition to a manifest signed by the generator in accordance with Section R315-263-20, the transporter shall also be provided with an EPA Acknowledgment of Consent which, except for shipments by rail, is attached to the manifest; or shipping paper for exports by water, bulk shipment. For exports of hazardous waste subject to the requirements of Sections R315-262-80 through 89, a transporter may not accept hazardous waste without a tracking document that includes all information required by Section R315-262-84.

(3) Compliance date for form revisions. The revised Manifest form and procedures in Sections R315-260-10, 261-7, 263-20, and 263-21, had an effective date of September 5, 2006.

(4) Use of electronic manifest-legal equivalence to paper forms for participating transporters. Electronic manifests that are obtained, completed, and transmitted in accordance with Subsection R315-262-20(a)(3), and used in accordance with Section R315-263-20 in lieu of EPA Forms 8700-22 and 8700-22A, are the legal equivalent of paper manifest forms bearing handwritten signatures, and satisfy for all purposes any requirement in these regulations to obtain, complete, sign, carry, provide, give, use, or retain a manifest.

(i) Any requirement in these regulations to sign a manifest or manifest certification by hand, or to obtain a handwritten signature, is satisfied by signing with or obtaining a valid and enforceable electronic signature within the meaning of Section R315-262-25.

(ii) Any requirement in these regulations to give, provide, send, forward, or return to another person a copy of the manifest is satisfied when a copy of an electronic manifest is transmitted to the other person by submission to the system.

(iii) Any requirement in these regulations for a manifest to accompany a hazardous waste shipment is satisfied when a copy of an electronic manifest is accessible during transportation and forwarded to the person or persons who are scheduled to receive delivery of the waste shipment, except that to the extent that the Hazardous Materials regulation on shipping papers for carriage by public highway requires transporters of hazardous materials to carry a paper document to comply with 49 CFR 177.817, a hazardous waste transporter shall carry one printed copy of the electronic manifest on the transport vehicle.

(iv) Any requirement in these regulations for a transporter to keep or retain a copy of a manifest is satisfied by the retention of an electronic manifest in the transporter's account on the e-Manifest system, provided that such copies are readily available for viewing and production if requested by any EPA or Utah inspector.

(v) No transporter may be held liable for the inability to produce an electronic manifest for inspection under Section R315-263-20 if that transporter can demonstrate that the inability to produce the electronic manifest is exclusively due to a technical difficulty with the EPA system for which the transporter bears no responsibility.

(5) A transporter may participate in the electronic manifest system either by accessing the electronic manifest system from the transporter's own electronic equipment, or by accessing the electronic manifest system from the equipment provided by a participating generator, by another transporter, or by a designated facility.

(6) Special procedures when electronic manifest is not available. If after a manifest has been originated electronically

and signed electronically by the initial transporter, and the electronic manifest system should become unavailable for any reason, then:

(i) The transporter in possession of the hazardous waste when the electronic manifest becomes unavailable shall reproduce sufficient copies of the printed manifest that is carried on the transport vehicle pursuant to Subsection R315-263-20(a)(4)(iii)(A), or obtain and complete another paper manifest for this purpose. The transporter shall reproduce sufficient copies to provide the transporter and all subsequent waste handlers with a copy for their files, plus two additional copies that will be delivered to the designated facility with the hazardous waste.

(ii) On each printed copy, the transporter shall include a notation in the Special Handling and Additional Description space, Item 14, that the paper manifest is a replacement manifest for a manifest originated in the electronic manifest system, shall include, if not pre-printed on the replacement manifest, the manifest tracking number of the electronic manifest that is replaced by the paper manifest, and shall also include a brief explanation why the electronic manifest was not available for completing the tracking of the shipment electronically.

(iii) A transporter signing a replacement manifest to acknowledge receipt of the hazardous waste shall ensure that each paper copy is individually signed and that a legible handwritten signature appears on each copy.

(iv) From the point at which the electronic manifest is no longer available for tracking the waste shipment, the paper replacement manifest copies shall be carried, signed, retained as records, and given to a subsequent transporter or to the designated facility, following the instructions, procedures, and requirements that apply to the use of all other paper manifests.

(7) Special procedures for electronic signature methods undergoing tests. If a transporter using an electronic manifest signs this manifest electronically using an electronic signature method which is undergoing pilot or demonstration tests aimed at demonstrating the practicality or legal dependability of the signature method, then the transporter shall sign the electronic manifest electronically and also sign with an ink signature the transporter acknowledgement of receipt of materials on the printed copy of the manifest that is carried on the vehicle in accordance with Subsection R315-263-20(a)(4)(iii)(A). This printed copy bearing the generator's and transporter's ink signatures shall also be presented by the transporter to the designated facility to sign in ink to indicate the receipt of the waste materials or to indicate discrepancies. After the owner/operator of the designated facility has signed this printed manifest copy with its ink signature, the printed manifest copy shall be delivered to the designated facility with the waste materials.

(8) Imposition of user fee for electronic manifest use. A transporter who is a user of the electronic manifest may be assessed a user fee by EPA for the origination or processing of each electronic manifest. EPA shall maintain and update from time-to-time the current schedule of electronic manifest user fees, which shall be determined based on current and projected system costs and level of use of the electronic manifest system. The current schedule of electronic manifest user fees shall be published as an appendix to 40 CFR part 262.

(b) Before transporting the hazardous waste, the transporter shall sign and date the manifest acknowledging acceptance of the hazardous waste from the generator. The transporter shall return a signed copy to the generator before leaving the generator's property.

(c) The transporter shall ensure that the manifest accompanies the hazardous waste. In the case of exports, the transporter shall ensure that a copy of the EPA Acknowledgment of Consent also accompanies the hazardous waste.

(d) A transporter who delivers a hazardous waste to another transporter or to the designated facility shall:

(1) Obtain the date of delivery and the handwritten signature of that transporter or of the owner or operator of the designated facility on the manifest; and

(2) Retain one copy of the manifest in accordance with Section R315-263-22; and

(3) Give the remaining copies of the manifest to the accepting transporter or designated facility.

(e) The requirements of Subsections R315-263-20(c), (d) and (f) do not apply to water, bulk shipment, transporters if:

(1) The hazardous waste is delivered by water, bulk shipment, to the designated facility; and

(2) A shipping paper containing all the information required on the manifest; excluding the EPA identification numbers, generator certification, and signatures; and, for exports, an EPA Acknowledgment of Consent accompanies the hazardous waste; and

(3) The delivering transporter obtains the date of delivery and handwritten signature of the owner or operator of the designated facility on either the manifest or the shipping paper; and

(4) The person delivering the hazardous waste to the initial water, bulk shipment, transporter obtains the date of delivery and signature of the water, bulk shipment, transporter on the manifest and forwards it to the designated facility; and

(5) A copy of the shipping paper or manifest is retained by each water, bulk shipment, transporter in accordance with Section R315-263-22.

(f) For shipments involving rail transportation, the requirements of Subsections R315-263-20(c), (d) and (e) do not apply and the following requirements do apply:

(1) When accepting hazardous waste from a non-rail transporter, the initial rail transporter shall:

(i) Sign and date the manifest acknowledging acceptance of the hazardous waste;

(ii) Return a signed copy of the manifest to the non-rail transporter;

(iii) Forward at least three copies of the manifest to:

(A) The next non-rail transporter, if any; or

(B) The designated facility, if the shipment is delivered to that facility by rail; or

(C) The last rail transporter designated to handle the waste in the United States;

(iv) Retain one copy of the manifest and rail shipping paper in accordance with Section R315-263-22.

(2) Rail transporters shall ensure that a shipping paper containing all the information required on the manifest; excluding the EPA identification numbers, generator certification, and signatures; and, for exports an EPA Acknowledgment of Consent accompanies the hazardous waste at all times. Note: Intermediate rail transporters are not required to sign either the manifest or shipping paper.

(3) When delivering hazardous waste to the designated facility, a rail transporter shall:

(i) Obtain the date of delivery and handwritten signature of the owner or operator of the designated facility on the manifest or the shipping paper, if the manifest has not been received by the facility; and

(ii) Retain a copy of the manifest or signed shipping paper in accordance with Section R315-263-22.

(4) When delivering hazardous waste to a non-rail transporter a rail transporter shall:

(i) Obtain the date of delivery and the handwritten signature of the next non-rail transporter on the manifest; and

(ii) Retain a copy of the manifest in accordance with Section R315-263-22.

(5) Before accepting hazardous waste from a rail transporter, a non-rail transporter shall sign and date the

manifest and provide a copy to the rail transporter.

(g) Transporters who transport hazardous waste out of the United States shall:

(1) Sign and date the manifest in the International Shipments block to indicate the date that the shipment left the United States;

(2) Retain one copy in accordance with Subsection R315-263-22(d);

(3) Return a signed copy of the manifest to the generator; and

(4) Give a copy of the manifest to a U.S. Customs official at the point of departure from the United States.

(h) A transporter transporting hazardous waste from a generator who generates greater than 100 kilograms but less than 1000 kilograms of hazardous waste in a calendar month need not comply with the requirements of Section 315-263-20 or those of Section R315-263-22 provided that:

(1) The waste is being transported pursuant to a reclamation agreement as provided for in Subsection R315-262-20(e);

(2) The transporter records, on a log or shipping paper, the following information for each shipment:

(i) The name, address, and U.S. EPA Identification Number of the generator of the waste;

(ii) The quantity of waste accepted;

(iii) All DOT-required shipping information;

(iv) The date the waste is accepted; and

(3) The transporter carries this record when transporting waste to the reclamation facility; and

(4) The transporter retains these records for a period of at least three years after termination or expiration of the agreement.

R315-263-21. Compliance with the Manifest.

(a) The transporter shall deliver the entire quantity of hazardous waste which he has accepted from a generator or a transporter to:

(1) The designated facility listed on the manifest; or

(2) The alternate designated facility, if the hazardous waste cannot be delivered to the designated facility because an emergency prevents delivery; or

(3) The next designated transporter; or

(4) The place outside the United States designated by the generator.

(b)(1) If the hazardous waste cannot be delivered in accordance with Subsection R315-263-21(a) because of an emergency condition other than rejection of the waste by the designated facility, then the transporter shall contact the generator for further directions and shall revise the manifest according to the generator's instructions.

(2) If hazardous waste is rejected by the designated facility while the transporter is on the facility's premises, then the transporter shall obtain the following:

(i) For a partial load rejection or for regulated quantities of container residues, a copy of the original manifest that includes the facility's date and signature, and the Manifest Tracking Number of the new manifest that shall accompany the shipment, and a description of the partial rejection or container residue in the discrepancy block of the original manifest. The transporter shall retain a copy of this manifest in accordance with Section R315-263-22, and give the remaining copies of the original manifest to the rejecting designated facility. If the transporter is forwarding the rejected part of the shipment or a regulated container residue to an alternate facility or returning it to the generator, the transporter shall obtain a new manifest to accompany the shipment, and the new manifest shall include all of the information required in Subsections R315-264-72(e)(1) through (6) or (f)(1) through (6) or 40 CFR 265.72(e)(1) through (6) or (f)(1) through (6), which are adopted by reference.

(ii) For a full load rejection that will be taken back by the transporter, a copy of the original manifest that includes the rejecting facility's signature and date attesting to the rejection, the description of the rejection in the discrepancy block of the manifest, and the name, address, phone number, and Identification Number for the alternate facility or generator to whom the shipment shall be delivered. The transporter shall retain a copy of the manifest in accordance with Section R315-263-22, and give a copy of the manifest containing this information to the rejecting designated facility. If the original manifest is not used, then the transporter shall obtain a new manifest for the shipment and comply with Subsection R315-264-72(e)(1) through (6) or 40 CFR 265.72(e)(1) through (6), which are adopted by reference.

R315-263-22. Recordkeeping.

(a) A transporter of hazardous waste shall keep a copy of the manifest signed by the generator, himself, and the next designated transporter or the owner or operator of the designated facility for a period of three years from the date the hazardous waste was accepted by the initial transporter.

(b) For shipments delivered to the designated facility by water, bulk shipment, each water, bulk shipment, transporter shall retain a copy of the shipping paper containing all the information required in Subsection R315-263-20(e)(2) for a period of three years from the date the hazardous waste was accepted by the initial transporter.

(c) For shipments of hazardous waste by rail within the United States:

(1) The initial rail transporter shall keep a copy of the manifest and shipping paper with all the information required in Subsection R315-263-20(f)(2) for a period of three years from the date the hazardous waste was accepted by the initial transporter; and

(2) The final rail transporter shall keep a copy of the signed manifest, or the shipping paper if signed by the designated facility in lieu of the manifest, for a period of three years from the date the hazardous waste was accepted by the initial transporter.

Note: Intermediate rail transporters are not required to keep records pursuant to these regulations.

(d) A transporter who transports hazardous waste out of the United States shall keep a copy of the manifest indicating that the hazardous waste left the United States for a period of three years from the date the hazardous waste was accepted by the initial transporter.

(e) The periods of retention referred to in Section R315-263-22 are extended automatically during the course of any unresolved enforcement action regarding the regulated activity or as requested by the Director.

R315-263-25. Electronic Manifest Signatures.

(a) Electronic manifest signatures shall meet the criteria described in Section R315-262-25.

R315-263-30. Immediate Action.

In the event of a spill of hazardous waste or material which, when spilled, becomes hazardous waste, the person responsible for the material at the time of the spill shall immediately:

(a) Take appropriate action to minimize the threat to human health and the environment.

(b) Notify the Utah State Department of Environmental Quality, 24-hour Answering Service, 801-536- 4123 if the following spill quantities are exceeded:

(1) One kilogram (2.2 pounds) of material listed in R315-261-31, and which is an acute hazardous waste identified with a hazard code of (H), or an acute hazardous Waste identified in R315-261-33(e). Notify for a spill of a lesser quantity if there is

a potential threat to human health or the environment; or

(2) One hundred kilograms (220 pounds) of hazardous waste or material which, when spilled, becomes hazardous waste, other than a spill of wastes identified in Subsection R315-263-30(a)(1). Notify for a spill of a lesser quantity if there is a potential threat to human health or the environment.

(c) Provide the following information when reporting the spill:

(1) Name, phone number, and address of person responsible for the spill.

(2) Name, title, and phone number of individual reporting.

(3) Time and date of spill.

(4) Location of spill -- as specific as possible including nearest town, city, highway or waterway.

(5) Description contained on the manifest and the amount of material spilled.

(6) Cause of spill.

(7) Emergency action taken to minimize the threat to human health and the environment.

(d) An air, rail, highway, or water transporter who has discharged hazardous waste shall:

(1) Give notice, if required by 49 CFR 171.15 to the National Response Center, 800-424-8802 or 202- 426-2675; and

(2) Report in writing as required by 49 CFR 171.16 to the Director, Office of Hazardous Materials Regulations, Materials Transportation Bureau, Department of Transportation, Washington, D.C. 20590.

(e) A water, bulk shipment, transporter who has discharged hazardous waste shall give the same notice as required by 33 CFR 153.203 for oil and hazardous substances.

R315-263-31. Spill Clean-up.

The person responsible for the material at the time of the spill shall clean up all the spilled material and any residue or contaminated media or other material resulting from the spill or take action as may be required by the Director so that the spilled material, residue, or contaminated media no longer presents a hazard to human health or the environment as defined in Rule R315-101. The cleanup or other required actions shall be at the expense of the person responsible for the spill. If the person responsible for the spill fails to take the required action, the Department may take action and bill the responsible person.

R315-263-32. Emergency Control Variance.

If a spill of hazardous waste requires immediate removal to protect human health or the environment, as determined by the Director, a variance may be granted by the Director to the manifest and recordkeeping requirements of these rules until the spilled material and any residue or contaminated soil, water or other material resulting from the spill no longer presents an immediate hazard to human health or the environment, as determined by the Director.

R315-263-33. Reporting.

Within 15 days after any spill of hazardous waste or material which, when spilled, becomes hazardous waste, and is reported under Subsection R315-263-30(b), the person responsible for the material at the time of the spill shall submit to the Director a written report which contains the following information:

(a) The person's name, address, and telephone number;

(b) Date, time, location, and nature of the incident;

(c) Name and quantity of material(s) involved;

(d) The extent of injuries, if any;

(e) An assessment of actual or potential hazards to human health or the environment, where this is applicable; and

(f) The estimated quantity and disposition of recovered material that resulted from the incident.

R315-263-34. Compliance with Department of Transportation Regulations.

Transporters of hazardous waste shall comply with the following pertinent regulations of the U.S. Department of Transportation governing the transportation of hazardous materials for both interstate and intrastate shipments:

(a) 49 CFR 171, General Information Regulations and Definitions;

(b) 49 CFR 172, Hazardous Materials Table and Hazardous Material Communications Regulations;

(c) 49 CFR 173, Shippers -- General Requirements for Shipments and Packaging;

(d) 49 CFR 174, Carriage by Rail;

(e) 49 CFR 175, Carriage by Aircraft;

(f) 49 CFR 176, Carriage by Vessel;

(g) 49 CFR 177, Carriage by Public Highway;

(h) 49 CFR 178, Shipping Container Specification; and

(i) 49 CFR 179, Specifications for Tank Cars.

**KEY: hazardous waste
August 31, 2017**

**19-6-105
19-6-106**

R315. Environmental Quality, Waste Management and Radiation Control, Waste Management.

R315-264. Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities.

R315-264-1. General -- Purpose, Scope and Applicability.

(a) The purpose of Rule R315-264 is to establish minimum State of Utah standards which define the acceptable management of hazardous waste.

(b) The standards in Rule R315-264 apply to owners and operators of all facilities which treat, store, or dispose of hazardous waste, except as specifically provided otherwise in Rules R315-264 or 261.

(c) Reserved

(d) The requirements of Rule R315-264 apply to a person disposing of hazardous waste by means of underground injection subject to a permit issued under an Underground Injection Control (UIC) program approved or promulgated under the Safe Drinking Water Act only to the extent they are required by 40 CFR 144.14. Rule R315-264 applies to the above-ground treatment or storage of hazardous waste before it is injected underground.

(e) The requirements of Rule R315-264 apply to the owner or operator of a POTW which treats, stores, or disposes of hazardous waste only to the extent they are included in a RCRA permit by rule granted to such a person under Rule R315-270.

(f) Reserved

(g) The requirements of Rule R315-264 do not apply to:

(1) The owner or operator of a facility permitted under Rules R315-301 through 320 to manage municipal or industrial solid waste, if the only hazardous waste the facility treats, stores, or disposes of is excluded from regulation under Rule R315-264 by Section R315-262-14;

(2) The owner or operator of a facility managing recyclable materials described in Subsections R315-261-6(a)(2), (3), and (4), except to the extent they are referred to in Rule R315-15 or Sections R315-266-20 through 23, 70, 80, or 100 through 112.

(3) A generator accumulating waste on site in compliance with Section R315-262-14, R315-262-15, R315-262-16, or R315-262-17;

(4) A farmer disposing of waste pesticides from his own use in compliance with Section R315-262-70; or

(5) The owner or operator of a totally enclosed treatment facility, as defined in Section R315-260-10.

(6) The owner or operator of an elementary neutralization unit or a wastewater treatment unit as defined in Section R315-260-10, provided that if the owner or operator is diluting hazardous ignitable (D001) wastes, other than the D001 High TOC Subcategory defined in Section R315-268-40, or reactive (D003) waste, to remove the characteristic before land disposal, the owner/operator shall comply with the requirements set out in Subsection R315-264-17(b).

(7) Reserved

(8)(i) Except as provided in Subsection R315-264-1(g)(8)(ii), a person engaged in treatment or containment activities during immediate response to any of the following situations:

(A) A discharge of a hazardous waste;

(B) An imminent and substantial threat of a discharge of hazardous waste;

(C) A discharge of a material which, when discharged, becomes a hazardous waste.

(ii) An owner or operator of a facility otherwise regulated by Rule R315-264 shall comply with all applicable requirements of Sections R315-264-30 through 35, 37 and 50 through 56.

(iii) Any person who is covered by Subsection R315-264-1(g)(8)(i) and who continues or initiates hazardous waste treatment or containment activities after the immediate response is over is subject to all applicable requirements of Rule R315-

264 and 40 CFR 122 and 123 and Rule R315-124 for those activities.

(iv) In the case of an explosives or munitions emergency response, if a Federal, State, Tribal or local official acting within the scope of his or her official responsibilities, or an explosives or munitions emergency response specialist, determines that immediate removal of the material or waste is necessary to protect human health or the environment, that official or specialist may authorize the removal of the material or waste by transporters who do not have EPA identification numbers and without the preparation of a manifest. In the case of emergencies involving military munitions, the responding military emergency response specialist's organizational unit shall retain records for three years identifying the dates of the response, the responsible persons responding, the type and description of material addressed, and its disposition.

(9) A transporter storing manifested shipments of hazardous waste in containers meeting the requirements of Section R315-262-30 at a transfer facility for a period of ten days or less.

(10) The addition of absorbent material to waste in a container, as defined in Section R315-260-10, or the addition of waste to absorbent material in a container, provided that these actions occur at the time waste is first placed in the container; and Subsections R315-264-17(b), 264-171, and 264-172 are complied with.

(11) Universal waste handlers and universal waste transporters, as defined in Section R315-260-10, handling the wastes listed below. These handlers are subject to regulation under Rule R315-273, when handling the below listed universal wastes.

(i) Batteries as described in Section R315-273-2;

(ii) Pesticides as described in Section R315-273-3;

(iii) Mercury-containing equipment as described in Section R315-273-4;

(iv) Lamps as described in Section R315-273-5;

(v) Antifreeze as described in Subsection R315-272-6(a); and

(vi) Aerosol cans as described in Subsection R315-273-6(b).

(h) The requirements of Rule R315-264 apply to owners or operators of all facilities which treat, store, or dispose of hazardous wastes referred to in Rule R315-268.

(i) Reserved

(j) The requirements of Sections R315-264-10 through 19, 30 through 37, 50 through 56, and 101 do not apply to remediation waste management sites. However, some remediation waste management sites may be a part of a facility that is subject to a traditional hazardous waste permit because the facility is also treating, storing or disposing of hazardous wastes that are not remediation wastes. In these cases, Sections R315-264-10 through 19, 30 through 37, 50 through 56, and 101 do apply to the facility subject to the traditional hazardous waste permit. Instead of the requirements of Sections R315-264-10 through 19, 30 through 37, and 50 through 56, owners or operators of remediation waste management sites shall:

(1) Obtain an EPA identification number by applying to the Administrator using EPA Form 8700-12;

(2) Obtain a detailed chemical and physical analysis of a representative sample of the hazardous remediation wastes to be managed at the site. At a minimum, the analysis shall contain all of the information which shall be known to treat, store or dispose of the waste according to Rules R315-264 and 268, and shall be kept accurate and up to date;

(3) Prevent people who are unaware of the danger from entering, and minimize the possibility for unauthorized people or livestock to enter onto the active portion of the remediation waste management site, unless the owner or operator can demonstrate to the Director that:

(i) Physical contact with the waste, structures, or equipment within the active portion of the remediation waste management site shall not injure people or livestock who may enter the active portion of the remediation waste management site; and

(ii) Disturbance of the waste or equipment by people or livestock who enter onto the active portion of the remediation waste management site, shall not cause a violation of the requirements of Rule R315-264;

(4) Inspect the remediation waste management site for malfunctions, deterioration, operator errors, and discharges that may be causing, or may lead to, a release of hazardous waste constituents to the environment, or a threat to human health. The owner or operator shall conduct these inspections often enough to identify problems in time to correct them before they harm human health or the environment, and shall remedy the problem before it leads to a human health or environmental hazard. Where a hazard is imminent or has already occurred, the owner/operator shall take remedial action immediately;

(5) Provide personnel with classroom or on-the-job training on how to perform their duties in a way that ensures the remediation waste management site complies with the requirements of Rule R315-264, and on how to respond effectively to emergencies;

(6) Take precautions to prevent accidental ignition or reaction of ignitable or reactive waste, and prevent threats to human health and the environment from ignitable, reactive and incompatible waste;

(7) For remediation waste management sites subject to regulation under Sections R315-264-170 through 179, 190 through 200, 220 through 232, 250 through 259, 270 Through 283, 300 through 317, 340 through 351, and 600 through 603, the owner/operator shall design, construct, operate, and maintain a unit within a 100-year floodplain to prevent washout of any hazardous waste by a 100-year flood, unless the owner/operator can meet the demonstration of Subsection R315-264-18(b);

(8) Not place any non-containerized or bulk liquid hazardous waste in any salt dome formation, salt bed formation, underground mine or cave;

(9) Develop and maintain a construction quality assurance program for all surface impoundments, waste piles and landfill units that are required to comply with Subsections R315-264-221(c) and (d), 264-251(c) and (d), and 264-301(c) and (d) at the remediation waste management site, according to the requirements of Section R315-264-19;

(10) Develop and maintain procedures to prevent accidents and a contingency and emergency plan to control accidents that occur. These procedures shall address proper design, construction, maintenance, and operation of remediation waste management units at the site. The goal of the plan shall be to minimize the possibility of, and the hazards from a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water that could threaten human health or the environment. The plan shall explain specifically how to treat, store and dispose of the hazardous remediation waste in question, and shall be implemented immediately whenever a fire, explosion, or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment;

(11) Designate at least one employee, either on the facility premises or on call (that is, available to respond to an emergency by reaching the facility quickly), to coordinate all emergency response measures. This emergency coordinator shall be thoroughly familiar with all aspects of the facility's contingency plan, all operations and activities at the facility, the location and characteristics of waste handled, the location of all records within the facility, and the facility layout. In addition, this person shall have the authority to commit the resources

needed to carry out the contingency plan;

(12) Develop, maintain and implement a plan to meet the requirements in Subsections R315-264-1(j)(2) through (j)(6) and (j)(9) through (j)(10); and

(13) Maintain records documenting compliance with Subsections R315-264-1(j)(1) through (j)(12).

R315-264-3. Relationship to Interim Status Standards.

A facility owner or operator who has fully complied with the requirements for interim status-as defined in section 3005(e) of RCRA and regulations under Section R315-270-70-shall comply with the regulations specified in Rule 265 in lieu of the regulations in Rule R315-264, until final administrative disposition of his permit application is made, except as provided under Sections R315-264-550 through 555.

R315-264-4. Imminent Hazard Action.

Notwithstanding any other provisions of these regulations, enforcement actions may be brought pursuant to Section 19-5-115.

R315-264-10. Applicability.

(a) The regulations in Sections R315-264-10 through 19 apply to owners and operators of all hazardous waste facilities, except as provided in Section R315-264-1 and in Subsection R315-264-10(b).

(b) Subsection R315-264-18(b) applies only to facilities subject to regulation under Sections R315-264-170 through 179, 190 through 200, 220 through 232, 250 through 259, 270 through 283, 300 through 317, 340 through 351, and 600 through 603.

R315-264-11. Identification Number.

Every facility owner or operator shall apply to Director for an EPA identification number using EPA form 8700-12. Information on obtaining this number can be acquired by contacting the Utah Division of Waste Management and Radiation Control.

R315-264-12. Required Notices.

(a)(1) The owner or operator of a facility that has arranged to receive hazardous waste from a foreign source shall notify the Director in writing at least four weeks in advance of the date the waste is expected to arrive at the facility. Notice of subsequent shipments of the same waste from the same foreign source is not required.

(2) The owner or operator of a recovery facility that has arranged to receive hazardous waste subject to Sections R315-262-80 through 89 shall provide a copy of the movement document bearing all required signatures to the foreign exporter; to the Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division (2254A), Environmental Protection Agency, 1200 Pennsylvania Avenue, NW., Washington, DC 20460; and to the competent authorities of all other countries concerned within three working days of receipt of the shipment. The original of the signed movement document shall be maintained at the facility for at least three years. In addition, such owner or operator shall, as soon as possible, but no later than thirty (30) days after the completion of recovery and no later than one (1) calendar year following the receipt of the hazardous waste, send a certificate of recovery to the foreign exporter and to the competent authority of the country of export and to EPA's Office of Enforcement and Compliance Assurance at the above address by mail, e-mail without a digital signature followed by mail, or fax followed by mail.

(b) The owner or operator of a facility that receives hazardous waste from an off-site source, except where the owner or operator is also the generator, shall inform the

generator in writing that he has the appropriate permit(s) for, and will accept, the waste the generator is shipping. The owner or operator shall keep a copy of this written notice as part of the operating record.

(c) Before transferring ownership or operation of a facility during its operating life, or of a disposal facility during the post-closure care period, the owner or operator shall notify the new owner or operator in writing of the requirements of Rule R315-264 and Rule R315-270. An owner's or operator's failure to notify the new owner or operator of the requirements of Rule R315-264 in no way relieves the new owner or operator of his obligation to comply with all applicable requirements.

R315-264-13. General Waste Analysis.

(a)(1) Before an owner or operator treats, stores, or disposes of any hazardous wastes, or nonhazardous wastes if applicable under Subsection R315-264-13(d), he shall obtain a detailed chemical and physical analysis of a representative sample of the wastes. At a minimum, the analysis shall contain all the information which shall be known to treat, store, or dispose of the waste in accordance with Rules R315-264 and 268.

(2) The analysis may include data developed under Rule R315-261, and existing published or documented data on the hazardous waste or on hazardous waste generated from similar processes. For example, the facility's records of analyses performed on the waste before the effective date of these regulations, or studies conducted on hazardous waste generated from processes similar to that which generated the waste to be managed at the facility, may be included in the data base required to comply with Subsection R315-264-13(a)(1). The owner or operator of an off-site facility may arrange for the generator of the hazardous waste to supply part of the information required by Subsection R315-264-13(a)(1), except as otherwise specified in Subsections R315-268-7(b) and (c). If the generator does not supply the information, and the owner or operator chooses to accept a hazardous waste, the owner or operator is responsible for obtaining the information required to comply with Section R315-264-13.

(3) The analysis shall be repeated as necessary to ensure that it is accurate and up to date. At a minimum, the analysis shall be repeated:

(i) When the owner or operator is notified, or has reason to believe, that the process or operation generating the hazardous wastes, or non-hazardous wastes if applicable under Subsection R315-264-13(d), has changed; and

(ii) For off-site facilities, when the results of the inspection required in Subsection R315-264-13(a)(4) indicate that the hazardous waste received at the facility does not match the waste designated on the accompanying manifest or shipping paper.

(4) The owner or operator of an off-site facility shall inspect and, if necessary, analyze each hazardous waste movement received at the facility to determine whether it matches the identity of the waste specified on the accompanying manifest or shipping paper.

(b) The owner or operator shall develop and follow a written waste analysis plan which describes the procedures which he will carry out to comply with Subsection R315-264-13(a). He shall keep this plan at the facility. At a minimum, the plan shall specify:

(1) The parameters for which each hazardous waste, or non-hazardous waste if applicable under Subsection R315-264-13(d), will be analyzed and the rationale for the selection of these parameters, i.e., how analysis for these parameters will provide sufficient information on the waste's properties to comply with Subsection R315-264-13(a);

(2) The test methods which will be used to test for these parameters;

(3) The sampling method which will be used to obtain a representative sample of the waste to be analyzed. A representative sample may be obtained using either:

(i) One of the sampling methods described in appendix I of Rule R315-261; or

(ii) An equivalent sampling method. See Section R315-260-21 for related discussion.

(4) The frequency with which the initial analysis of the waste will be reviewed or repeated to ensure that the analysis is accurate and up to date; and

(5) For off-site facilities, the waste analyses that hazardous waste generators have agreed to supply.

(6) Where applicable, the methods that will be used to meet the additional waste analysis requirements for specific waste management methods as specified in Sections R315-264-17, 264-314, 264-341, 264-1083, and 268-7 and Subsections R315-264-1034(d) and 264-1063(d).

(7) For surface impoundments exempted from land disposal restrictions under Subsection R315-268-4(a), the procedures and schedules for:

(i) The sampling of impoundment contents;

(ii) The analysis of test data; and,

(iii) The annual removal of residues which are not delisted under Section R315-260-22 or which exhibit a characteristic of hazardous waste and either:

(A) Do not meet applicable treatment standards of Sections R315-268-40 through 49; or

(B) Where no treatment standards have been established:

(I) Such residues are prohibited from land disposal under Section R315-268-32 or RCRA section 3004(d); or

(II) Such residues are prohibited from land disposal under Subsection R315-268-33(f).

(8) For owners and operators seeking an exemption to the air emission standards of Sections R315-264-1080 through 1091 in accordance with Section R315-264-1082:

(i) If direct measurement is used for the waste determination, the procedures and schedules for waste sampling and analysis, and the results of the analysis of test data to verify the exemption.

(ii) If knowledge of the waste is used for the waste determination, any information prepared by the facility owner or operator or by the generator of the hazardous waste, if the waste is received from off-site, that is used as the basis for knowledge of the waste.

(c) For off-site facilities, the waste analysis plan required in Subsection R315-264-13(b) shall also specify the procedures which will be used to inspect and, if necessary, analyze each movement of hazardous waste received at the facility to ensure that it matches the identity of the waste designated on the accompanying manifest or shipping paper. At a minimum, the plan shall describe:

(1) The procedures which will be used to determine the identity of each movement of waste managed at the facility; and

(2) The sampling method which will be used to obtain a representative sample of the waste to be identified, if the identification method includes sampling.

(3) The procedures that the owner or operator of an off-site landfill receiving containerized hazardous waste will use to determine whether a hazardous waste generator or treater has added a biodegradable sorbent to the waste in the container.

R315-264-14. Security.

(a) The owner or operator shall prevent the unknowing entry, and minimize the possibility for the unauthorized entry, of persons or livestock onto the active portion of his facility, unless he can demonstrate to the Director that:

(1) Physical contact with the waste, structures, or equipment within the active portion of the facility will not injure unknowing or unauthorized persons or livestock which may

enter the active portion of a facility; and

(2) Disturbance of the waste or equipment, by the unknowing or unauthorized entry of persons or livestock onto the active portion of a facility, will not cause a violation of the requirements of Rule R315-264. An owner or operator who wishes to make the demonstration referred to above shall do so with part B of the permit application.

(b) Unless the owner or operator has made a successful demonstration under Subsection R315-264-14(a)(1) and (2), a facility shall have:

(1) A 24-hour surveillance system, e.g., television monitoring or surveillance by guards or facility personnel, which continuously monitors and controls entry onto the active portion of the facility; or

(2)(i) An artificial or natural barrier, e.g., a fence in good repair or a fence combined with a cliff, which completely surrounds the active portion of the facility; and

(ii) A means to control entry, at all times, through the gates or other entrances to the active portion of the facility, e.g., an attendant, television monitors, locked entrance, or controlled roadway access to the facility. The requirements of Subsection R315-264-14(b) are satisfied if the facility or plant within which the active portion is located itself has a surveillance system, or a barrier and a means to control entry, which complies with the requirements of Subsection R315-264-14(b)(1) or (2).

(c) Unless the owner or operator has made a successful demonstration under Subsection R315-264-14(a)(1) and (2), a sign with the legend, "Danger-Unauthorized Personnel Keep Out", shall be posted at each entrance to the active portion of a facility, and at other locations, in sufficient numbers to be seen from any approach to this active portion. The legend shall be written in English and in any other language predominant in the area surrounding the facility, e.g., facilities in counties bordering the Canadian province of Quebec shall post signs in French; facilities in counties bordering Mexico shall post signs in Spanish, and shall be legible from a distance of at least 25 feet. Existing signs with a legend other than "Danger-Unauthorized Personnel Keep Out" may be used if the legend on the sign indicates that only authorized personnel are allowed to enter the active portion, and that entry onto the active portion can be dangerous. See Subsection R315-264-117(b) for discussion of security requirements at disposal facilities during the post-closure care period.

R315-264-15. General Facility Standards -- General Inspection Requirements.

(a) The owner or operator shall inspect his facility for malfunctions and deterioration, operator errors, and discharges which may be causing or may lead to release of hazardous waste constituents to the environment or a threat to human health. The owner or operator shall conduct these inspections often enough to identify problems in time to correct them before they harm human health or the environment.

(b)(1) The owner or operator shall develop and follow a written schedule for inspecting monitoring equipment, safety and emergency equipment, security devices, and operating and structural equipment, such as dikes and sump pumps, that are important to preventing, detecting, or responding to environmental or human health hazards.

(2) He shall keep this schedule at the facility.

(3) The schedule shall identify the types of problems, e.g., malfunctions or deterioration, which are to be looked for during the inspection, e.g., inoperative sump pump, leaking fitting, eroding dike, etc.

(4) The frequency of inspection may vary for the items on the schedule. However, the frequency should be based on the rate of deterioration of the equipment and the probability of an environmental or human health incident if the deterioration, malfunction, or operator error goes undetected between

inspections. Areas subject to spills, such as loading and unloading areas, shall be inspected daily when in use. At a minimum, the inspection schedule shall include the items and frequencies called for in Sections R315-264-174, 193, 195, 226, 254, 278, 303, 347, 602, 1033, 1052, 1053, 1058, and 1083 through 1089, where applicable. Rule R315-270 requires the inspection schedule to be submitted with part B of the permit application. The Director shall evaluate the schedule along with the rest of the application to ensure that it adequately protects human health and the environment. As part of this review, The Director may modify or amend the schedule as may be necessary.

(c) The owner or operator shall remedy any deterioration or malfunction of equipment or structures which the inspection reveals on a schedule which ensures that the problem does not lead to an environmental or human health hazard. Where a hazard is imminent or has already occurred, remedial action shall be taken immediately.

(d) The owner or operator shall record inspections in an inspection log or summary. He shall keep these records for at least three years from the date of inspection. At a minimum, these records shall include the date and time of the inspection, the name of the inspector, a notation of the observations made, and the date and nature of any repairs or other remedial actions.

R315-264-16. Personnel Training.

(a)(1) Facility personnel shall successfully complete a program of classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with the requirements of Rule R315-264. The owner or operator shall ensure that this program includes all the elements described in the document required under Subsection R315-264-16(d)(3). Rule R315-270 requires that owners and operators submit with part B of the RCRA permit application, an outline of the training program used, or to be used, at the facility and a brief description of how the training program is designed to meet actual job tasks.

(2) This program shall be directed by a person trained in hazardous waste management procedures, and shall include instruction which teaches facility personnel hazardous waste management procedures, including contingency plan implementation, relevant to the positions in which they are employed.

(3) At a minimum, the training program shall be designed to ensure that facility personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment, and emergency systems, including, where applicable:

- (i) Procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment;
 - (ii) Key parameters for automatic waste feed cut-off systems;
 - (iii) Communications or alarm systems;
 - (iv) Response to fires or explosions;
 - (v) Response to ground-water contamination incidents;
- and
- (vi) Shutdown of operations.

(4) For facility employees that receive emergency response training pursuant to Occupational Safety and Health Administration (OSHA) regulations 29 CFR 1910.120(p)(8) and 1910.120(q), the facility is not required to provide separate emergency response training pursuant to Section R315-264-16, provided that the overall facility training meets all the requirements Section R315-264-16.

(b) Facility personnel shall successfully complete the program required in Subsection R315-264-16(a) within six months after the effective date of these regulations or six months after the date of their employment or assignment to a facility, or to a new position at a facility, whichever is later. Employees

hired after the effective date of these regulations shall not work in unsupervised positions until they have completed the training requirements of Subsection R315-264-16(a).

(c) Facility personnel shall take part in an annual review of the initial training required in Subsection R315-264-16(a).

(d) The owner or operator shall maintain the following documents and records at the facility:

(1) The job title for each position at the facility related to hazardous waste management, and the name of the employee filling each job;

(2) A written job description for each position listed under Subsection R315-264-16(d)(1). This description may be consistent in its degree of specificity with descriptions for other similar positions in the same company location or bargaining unit, but shall include the requisite skill, education, or other qualifications, and duties of employees assigned to each position;

(3) A written description of the type and amount of both introductory and continuing training that will be given to each person filling a position listed under Subsection R315-264-16(d)(1);

(4) Records that document that the training or job experience required under Subsections R315-264-16(a), (b), and (c) has been given to, and completed by, facility personnel.

(e) Training records on current personnel shall be kept until closure of the facility; training records on former employees shall be kept for at least three years from the date the employee last worked at the facility. Personnel training records may accompany personnel transferred within the same company.

R315-264-17. General Requirements for Ignitable, Reactive, or Incompatible Wastes.

(a) The owner or operator shall take precautions to prevent accidental ignition or reaction of ignitable or reactive waste. This waste shall be separated and protected from sources of ignition or reaction including but not limited to: open flames; smoking; cutting and welding; hot surfaces; frictional heat; sparks, static, electrical, or mechanical; spontaneous ignition, e.g., from heat-producing chemical reactions; and radiant heat. While ignitable or reactive waste is being handled, the owner or operator shall confine smoking and open flame to specially designated locations. "No Smoking" signs shall be conspicuously placed wherever there is a hazard from ignitable or reactive waste.

(b) Where specifically required by other sections of Rule R315-264, the owner or operator of a facility that treats, stores or disposes ignitable or reactive waste, or mixes incompatible waste or incompatible wastes and other materials, shall take precautions to prevent reactions which:

(1) Generate extreme heat or pressure, fire or explosions, or violent reactions;

(2) Produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantities to threaten human health or the environment;

(3) Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions;

(4) Damage the structural integrity of the device or facility;

(5) Through other like means threaten human health or the environment.

(c) When required to comply with Subsections R315-264-17(a) or (b), the owner or operator shall document that compliance. This documentation may be based on references to published scientific or engineering literature, data from trial tests, e.g., bench scale or pilot scale tests, waste analyses, as specified in Section R315-264-264-13, or the results of the treatment of similar wastes by similar treatment processes and under similar operating conditions.

R315-264-18. Location Standards.

(a) Seismic considerations.

(1) Portions of new facilities where treatment, storage, or disposal of hazardous waste will be conducted shall not be located within 61 meters (200 feet) of a fault which has had displacement in Holocene time. Procedures for demonstrating compliance with this standard in part B of the permit application are specified in Subsection R315-270-14(b)(11). Facilities which are located in political jurisdictions other than those listed in appendix VI of Rule R315-264, are assumed to be in compliance with this requirement.

(2) As used in Subsection R315-264-18(a)(1):

(i) "Fault" means a fracture along which rocks on one side have been displaced with respect to those on the other side.

(ii) "Displacement" means the relative movement of any two sides of a fault measured in any direction.

(iii) "Holocene" means the most recent epoch of the Quaternary period, extending from the end of the Pleistocene to the present.

(b) Floodplains.

(1) A facility located in a 100-year floodplain shall be designed, constructed, operated, and maintained to prevent washout of any hazardous waste by a 100-year flood, unless the owner or operator can demonstrate to the Director's satisfaction that:

(i) Procedures are in effect which will cause the waste to be removed safely, before flood waters can reach the facility, to a location where the wastes will not be vulnerable to flood waters, provided that the facility where the waste is moved is a permitted hazardous waste disposal facility or a facility in interim status; or

(ii) For existing surface impoundments, waste piles, land treatment units, landfills, and miscellaneous units, no adverse effects on human health or the environment will result if washout occurs, considering:

(A) The volume and physical and chemical characteristics of the waste in the facility;

(B) The concentration of hazardous constituents that would potentially affect surface waters as a result of washout;

(C) The impact of such concentrations on the current or potential uses of and water quality standards established for the affected surface waters; and

(D) The impact of hazardous constituents on the sediments of affected surface waters or the soils of the 100-year floodplain that could result from washout.

(2) As used in Subsection R315-264-18(b)(1):

(i) "100-year floodplain" means any land area which is subject to a one percent or greater chance of flooding in any given year from any source.

(ii) "Washout" means the movement of hazardous waste from the active portion of the facility as a result of flooding.

(iii) "100-year flood" means a flood that has a one percent chance of being equalled or exceeded in any given year.

(c) Salt dome formations, salt bed formations, underground mines and caves. The placement of any noncontainerized or bulk liquid hazardous waste in any salt dome formation, salt bed formation, underground mine or cave is prohibited, except for the Department of Energy Waste Isolation Pilot Project in New Mexico.

R315-264-19. Construction Quality Assurance Program.

(a) CQA program.

(1) A construction quality assurance (CQA) program is required for all surface impoundment, waste pile, and landfill units that are required to comply with Subsections R315-264-221(c) and (d), 264-251(c) and (d), and 264-301(c) and (d). The program shall ensure that the constructed unit meets or exceeds all design criteria and specifications in the permit. The program shall be developed and implemented under the direction of a CQA officer who is a registered professional engineer.

(2) The CQA program shall address the following physical components, where applicable:

- (i) Foundations;
- (ii) Dikes;
- (iii) Low-permeability soil liners;
- (iv) Geomembranes, flexible membrane liners;
- (v) Leachate collection and removal systems and leak detection systems; and
- (vi) Final cover systems.

(b) Written CQA plan. The owner or operator of units subject to the CQA program under Subsection R315-264-19(a) shall develop and implement a written CQA plan. The plan shall identify steps that will be used to monitor and document the quality of materials and the condition and manner of their installation. The CQA plan shall include:

(1) Identification of applicable units, and a description of how they will be constructed.

(2) Identification of key personnel in the development and implementation of the CQA plan, and CQA officer qualifications.

(3) A description of inspection and sampling activities for all unit components identified in Subsection R315-264-19(a)(2), including observations and tests that will be used before, during, and after construction to ensure that the construction materials and the installed unit components meet the design specifications. The description shall cover: Sampling size and locations; frequency of testing; data evaluation procedures; acceptance and rejection criteria for construction materials; plans for implementing corrective measures; and data or other information to be recorded and retained in the operating record under Sections R315-264-73.

(c) Contents of program.

(1) The CQA program shall include observations, inspections, tests, and measurements sufficient to ensure:

(i) Structural stability and integrity of all components of the unit identified in Subsection R315-264-19(a)(2);

(ii) Proper construction of all components of the liners, leachate collection and removal system, leak detection system, and final cover system, according to permit specifications and good engineering practices, and proper installation of all components, e.g., pipes, according to design specifications;

(iii) Conformity of all materials used with design and other material specifications under Sections R315-264-221, 264-251, and 264-301.

(2) The CQA program shall include test fills for compacted soil liners, using the same compaction methods as in the full scale unit, to ensure that the liners are constructed to meet the hydraulic conductivity requirements of Subsections R315-264-221(c)(1)(i)(B), 264-251(c)(1)(i)(B), and 264-301(c)(1)(i)(B) in the field. Compliance with the hydraulic conductivity requirements shall be verified by using in-situ testing on the constructed test fill. The Director may accept an alternative demonstration, in lieu of a test fill, where data are sufficient to show that a constructed soil liner will meet the hydraulic conductivity requirements of Subsections R315-264-221(c)(1)(i)(B), 264-251(c)(1)(i)(B), and 264-301(c)(1)(i)(B) in the field.

(d) Certification. Waste shall not be received in a unit subject to Section R315-264-19 until the owner or operator has submitted to the Director by certified mail or hand delivery a certification signed by the CQA officer that the approved CQA plan has been successfully carried out and that the unit meets the requirements of Subsections R315-264-221 (c) or (d), 264-251 (c) or (d), or 264-301 (c) or (d); and the procedure in Subsection R315-270-30(1)(2)(ii) has been completed. Documentation supporting the CQA officer's certification shall be furnished to the Director upon request.

R315-264-30. Applicability.

The regulations in Sections R316-264-30 through 37 apply to owners and operators of all hazardous waste facilities, except as Section R315-264-1 provides otherwise.

R315-264-31. Design and Operation of Facility.

Facilities shall be designed, constructed, maintained, and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.

R315-264-32. Required Equipment.

All facilities shall be equipped with the following, unless it can be demonstrated to the Director that none of the hazards posed by waste handled at the facility could require a particular kind of equipment specified below:

(a) An internal communications or alarm system capable of providing immediate emergency instruction, voice or signal, to facility personnel;

(b) A device, such as a telephone, immediately available at the scene of operations, or a hand-held two-way radio, capable of summoning emergency assistance from local police departments, fire departments, or State or local emergency response teams;

(c) Portable fire extinguishers, fire control equipment, including special extinguishing equipment, such as that using foam, inert gas, or dry chemicals; spill control equipment; and decontamination equipment; and

(d) Water at adequate volume and pressure to supply water hose streams, or foam producing equipment, or automatic sprinklers, or water spray systems.

Rule R315-270 requires that an owner or operator who wishes to make the demonstration referred to above shall do so with part B of the permit application.

R315-264-33. Testing and Maintenance of Equipment.

All facility communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, where required, shall be tested and maintained as necessary to assure its proper operation in time of emergency.

R315-264-34. Access to Communications or Alarm System.

(a) Whenever hazardous waste is being poured, mixed, spread, or otherwise handled, all personnel involved in the operation shall have immediate access to an internal alarm or emergency communication device, either directly or through visual or voice contact with another employee, unless the Director has ruled that such a device is not required under Section R315-264-32.

(b) If there is ever just one employee on the premises while the facility is operating, he shall have immediate access to a device, such as a telephone, immediately available at the scene of operation, or a hand-held two-way radio, capable of summoning external emergency assistance, unless the Director has ruled that such a device is not required under Section R315-264-32.

R315-264-35. Required Aisle Space.

The owner or operator shall maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency, unless it can be demonstrated to the Director that aisle space is not needed for any of these purposes. This demonstration shall be made with the part B permit application.

R315-264-37. Arrangements with Local Authorities.

(a) The owner or operator shall attempt to make the

following arrangements, as appropriate for the type of waste handled at his facility and the potential need for the services of these organizations:

(1) Arrangements to familiarize police, fire departments, and emergency response teams with the layout of the facility, properties of hazardous waste handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to and roads inside the facility, and possible evacuation routes;

(2) Where more than one police and fire department might respond to an emergency, agreements designating primary emergency authority to a specific police and a specific fire department, and agreements with any others to provide support to the primary emergency authority;

(3) Agreements with State emergency response teams, emergency response contractors, and equipment suppliers; and

(4) Arrangements to familiarize local hospitals with the properties of hazardous waste handled at the facility and the types of injuries or illnesses which could result from fires, explosions, or releases at the facility.

(b) Where State or local authorities decline to enter into such arrangements, the owner or operator shall document the refusal in the operating record.

R315-264-50. Contingency Plan and Emergency Procedures -- Applicability.

The regulations in Sections R315-264-50 through 56 apply to owners and operators of all hazardous waste facilities, except as Section R315-264-1 provides otherwise.

R315-264-51. Purpose and Implementation of Contingency Plan.

(a) Each owner or operator shall have a contingency plan for his facility. The contingency plan shall be designed to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water.

(b) The provisions of the plan shall be carried out immediately whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment.

R315-264-52. Content of Contingency Plan.

(a) The contingency plan shall describe the actions facility personnel shall take to comply with Sections R315-264-51 and 56 in response to fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water at the facility.

(b) If the owner or operator has already prepared a Spill Prevention, Control, and Countermeasures (SPCC) Plan in accordance with 40 CFR 112, or some other emergency or contingency plan, he need only amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with the requirements of Rule R315-264. The owner or operator may develop one contingency plan which meets all regulatory requirements. EPA recommends that the plan be based on the National Response Team's Integrated Contingency Plan Guidance ("One Plan"). When modifications are made to non-RCRA provisions in an integrated contingency plan, the changes do not trigger the need for a RCRA permit modification.

(c) The plan shall describe arrangements agreed to by local police departments, fire departments, hospitals, contractors, and State and local emergency response teams to coordinate emergency services, pursuant to Section R315-264-37.

(d) The plan shall list names, addresses, and phone numbers, office and home, of all persons qualified to act as emergency coordinator, see Section R315-264-55, and this list

shall be kept up to date. Where more than one person is listed, one shall be named as primary emergency coordinator and others shall be listed in the order in which they will assume responsibility as alternates. For new facilities, this information shall be supplied to the Director at the time of certification, rather than at the time of permit application.

(e) The plan shall include a list of all emergency equipment at the facility; such as fire extinguishing systems, spill control equipment, communications and alarm systems, internal and external, and decontamination equipment; where this equipment is required. This list shall be kept up to date. In addition, the plan shall include the location and a physical description of each item on the list, and a brief outline of its capabilities.

(f) The plan shall include an evacuation plan for facility personnel where there is a possibility that evacuation could be necessary. This plan shall describe signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes, in cases where the primary routes could be blocked by releases of hazardous waste or fires.

R315-264-53. Copies of Contingency Plan.

A copy of the contingency plan and all revisions to the plan shall be:

(a) Maintained at the facility;

(b) Submitted to all local police departments, fire departments, hospitals, and State and local emergency response teams that may be called upon to provide emergency services; and

(c) Made available upon request. The contingency plan shall be submitted to the Director with Part B of the permit application under Rule R315-270 and, after modification or approval, will become a condition of any permit issued.

R315-264-54. Amendment of Contingency Plan.

The contingency plan shall be reviewed, and immediately amended, if necessary, whenever:

(a) The facility permit is revised;

(b) The plan fails in an emergency;

(c) The facility changes-in its design, construction, operation, maintenance, or other circumstances-in a way that materially increases the potential for fires, explosions, or releases of hazardous waste or hazardous waste constituents, or changes the response necessary in an emergency;

(d) The list of emergency coordinators changes; or

(e) The list of emergency equipment changes.

R315-264-55. Emergency Coordinator.

At all times, there shall be at least one employee either on the facility premises or on call, i.e., available to respond to an emergency by reaching the facility within a short period of time, with the responsibility for coordinating all emergency response measures. This emergency coordinator shall be thoroughly familiar with all aspects of the facility's contingency plan, all operations and activities at the facility, the location and characteristics of waste handled, the location of all records within the facility, and the facility layout. In addition, this person shall have the authority to commit the resources needed to carry out the contingency plan. The emergency coordinator's responsibilities are more fully spelled out in Section R315-264-56. Applicable responsibilities for the emergency coordinator vary, depending on factors such as type and variety of waste(s) handled by the facility, and type and complexity of the facility.

R315-264-56. Emergency Procedures.

(a) Whenever there is an imminent or actual emergency situation, the emergency coordinator, or his designee when the emergency coordinator is on call, shall immediately:

(1) Activate internal facility alarms or communication

systems, where applicable, to notify all facility personnel; and
 (2) Notify appropriate State or local agencies with designated response roles if their help is needed.

(b) Whenever there is a release, fire, or explosion, the emergency coordinator shall immediately identify the character, exact source, amount, and areal extent of any released materials. He may do this by observation or review of facility records or manifests, and, if necessary, by chemical analysis.

(c) Concurrently, the emergency coordinator shall assess possible hazards to human health or the environment that may result from the release, fire, or explosion. This assessment shall consider both direct and indirect effects of the release, fire, or explosion, e.g., the effects of any toxic, irritating, or asphyxiating gases that are generated, or the effects of any hazardous surface water run-off from water or chemical agents used to control fire and heat-induced explosions.

(d) If the emergency coordinator determines that the facility has had a release, fire, or explosion which could threaten human health, or the environment, outside the facility, he shall report his findings as follows:

(1) If his assessment indicates that evacuation of local areas may be advisable, he shall immediately notify appropriate local authorities. He shall be available to help appropriate officials decide whether local areas should be evacuated; and

(2) He shall immediately notify Utah Department of Environmental Quality as specified in Section R315-263-30 and either the government official designated as the on-scene coordinator for that geographical area, or the National Response Center (using their 24-hour toll free number 800/424-8802). The report shall include:

- (i) Name and telephone number of reporter;
- (ii) Name and address of facility;
- (iii) Time and type of incident (e.g., release, fire);
- (iv) Name and quantity of material(s) involved, to the extent known;
- (v) The extent of injuries, if any; and
- (vi) The possible hazards to human health, or the environment, outside the facility.

(e) During an emergency, the emergency coordinator shall take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other hazardous waste at the facility. These measures shall include, where applicable, stopping processes and operations, collecting and containing release waste, and removing or isolating containers.

(f) If the facility stops operations in response to a fire, explosion, or release, the emergency coordinator shall monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, wherever this is appropriate.

(g) Immediately after an emergency, the emergency coordinator shall provide for treating, storing, or disposing of recovered waste, contaminated soil or surface water, or any other material that results from a release, fire, or explosion at the facility. Unless the owner or operator can demonstrate, in accordance with Subsection R315-261-3(c) or (d), that the recovered material is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and shall manage it in accordance with all applicable requirements of Rules R315-262, 263, and 264.

(h) The emergency coordinator shall ensure that, in the affected area(s) of the facility:

(1) No waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed; and

(2) All emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.

(i) The owner or operator shall note in the operating record the time, date, and details of any incident that requires

implementing the contingency plan. Within 15 days after the incident, he shall submit a written report on the incident to the Director. The report shall include:

(1) Name, address, and telephone number of the owner or operator;

(2) Name, address, and telephone number of the facility;

(3) Date, time, and type of incident (e.g., fire, explosion);

(4) Name and quantity of material(s) involved;

(5) The extent of injuries, if any;

(6) An assessment of actual or potential hazards to human health or the environment, where this is applicable; and

(7) Estimated quantity and disposition of recovered material that resulted from the incident.

(j) The facility owner or operator shall notify the Director and other appropriate federal, State, and local authorities, that the facility is in compliance with R315-264-56(h) before operations are resumed in the affected area(s) of the facility.

R315-264-70. Manifest System, Recordkeeping, and Reporting -- Applicability.

(a) The regulations in Sections R315-264-70 through 77 apply to owners and operators of both on-site and off-site facilities, except as Section R315-264-1 provides otherwise. Sections R315-264-71, 72, and 76 do not apply to owners and operators of on-site facilities that do not receive any hazardous waste from off-site sources. Subsection R315-264-73(b) only applies to permittees who treat, store, or dispose of hazardous wastes on-site where such wastes were generated.

R315-264-71. Manifest System, Recordkeeping, and Reporting -- Use of Manifest System.

(a)(1) If a facility receives hazardous waste accompanied by a manifest, the owner, operator or his/her agent shall sign and date the manifest as indicated in Subsection R315-264-71(a)(2) to certify that the hazardous waste covered by the manifest was received, that the hazardous waste was received except as noted in the discrepancy space of the manifest, or that the hazardous waste was rejected as noted in the manifest discrepancy space.

(2) If the facility receives a hazardous waste shipment accompanied by a manifest, the owner, operator, or his agent shall:

(i) Sign and date, by hand, each copy of the manifest;

(ii) Note any discrepancies, as defined in Subsection R315-264-72(a), on each copy of the manifest;

(iii) Immediately give the transporter at least one copy of the manifest;

(iv) Within 30 days of delivery, send a copy, Page 3, of the manifest to the generator,

(v) Within 30 days of delivery, send the top copy, Page 1, of the Manifest to the e-Manifest system for purposes of data entry and processing. In lieu of mailing this paper copy to EPA, the owner or operator may transmit to the EPA system an image file of Page 1 of the manifest, or both a data string file and the image file corresponding to Page 1 of the manifest. Any data or image files transmitted to EPA under Subsection R315-264-71(a) shall be submitted in data file and image file formats that are acceptable to EPA and that are supported by EPA's electronic reporting requirements and by the electronic manifest system.

(vi) Retain at the facility a copy of each manifest for at least three years from the date of delivery.

(3) If a facility receives hazardous waste imported from a foreign source, the receiving facility shall mail a copy of the manifest and documentation confirming EPA's consent to the import of hazardous waste to the following address within thirty days of delivery: Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division (2254A), Environmental

Protection Agency, 1200 Pennsylvania Avenue, NW., Washington, DC 20460 and Utah Division of Waste Management and Radiation Control, P O Box 144880, Salt Lake City, Utah 84114-4880.

(b) If a facility receives, from a rail or water (bulk shipment) transporter, hazardous waste which is accompanied by a shipping paper containing all the information required on the manifest; excluding the EPA identification numbers, generator's certification, and signatures; the owner or operator, or his agent, shall:

(1) Sign and date each copy of the manifest or shipping paper, if the manifest has not been received, to certify that the hazardous waste covered by the manifest or shipping paper was received;

(2) Note any significant discrepancies, as defined in Subsection R315-264-72(a), in the manifest or shipping paper, if the manifest has not been received, on each copy of the manifest or shipping paper. The Director does not intend that the owner or operator of a facility whose procedures under R315-264-13(c) include waste analysis shall perform that analysis before signing the shipping paper and giving it to the transporter. Subsection R315-264-72(b), however, requires reporting an unreconciled discrepancy discovered during later analysis.

(3) Immediately give the rail or water (bulk shipment) transporter at least one copy of the manifest or shipping paper, if the manifest has not been received;

(4) Within 30 days after the delivery, send a copy of the signed and dated manifest or a signed and dated copy of the shipping paper, if the manifest has not been received within 30 days after delivery, to the generator; and

Comment: Subsection R315-262-23(c) requires the generator to send three copies of the manifest to the facility when hazardous waste is sent by rail or water (bulk shipment).

(5) Retain at the facility a copy of the manifest and shipping paper, if signed in lieu of the manifest at the time of delivery, for at least three years from the date of delivery.

(c) Whenever a shipment of hazardous waste is initiated from a facility, the owner or operator of that facility shall comply with the requirements of Rule R315-262. The provisions of Sections R315-262-15, R315-262-16, and R315-262-17 are applicable to the on-site accumulation of hazardous wastes by generators. Therefore, the provisions of Sections R315-262-15, R315-262-16, and R315-262-17 only apply to owners or operators who are shipping hazardous waste which they generated at that facility or operating as a large quantity generator consolidating hazardous waste from very small quantity generators under Subsection R315-262-17(f).

(d) Within three working days of the receipt of a shipment subject to Sections R315-262-80 through 89 the owner or operator of a facility shall provide a copy of the movement document bearing all required signatures to the exporter, to the Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division (2254A), Environmental Protection Agency, 1200 Pennsylvania Avenue, NW., Washington, DC 20460, and to competent authorities of all other concerned countries. The original copy of the movement document shall be maintained at the facility for at least three years from the date of signature.

(e) A facility shall determine whether the consignment state for a shipment regulates any additional wastes, beyond those regulated Federally, as hazardous wastes under its state hazardous waste program. Facilities shall also determine whether the consignment state or generator state requires the facility to submit any copies of the manifest to these states.

(f) Legal equivalence to paper manifests. Electronic manifests that are obtained, completed, and transmitted in accordance with Subsection R315-262-20(a)(3), and used in accordance with Section R315-264-71 in lieu of the paper

manifest form are the legal equivalent of paper manifest forms bearing handwritten signatures, and satisfy for all purposes any requirement in these regulations to obtain, complete, sign, provide, use, or retain a manifest.

(1) Any requirement in these regulations for the owner or operator of a facility to sign a manifest or manifest certification by hand, or to obtain a handwritten signature, is satisfied by signing with or obtaining a valid and enforceable electronic signature within the meaning of Section R315-262-25.

(2) Any requirement in these regulations to give, provide, send, forward, or to return to another person a copy of the manifest is satisfied when a copy of an electronic manifest is transmitted to the other person.

(3) Any requirement in these regulations for a manifest to accompany a hazardous waste shipment is satisfied when a copy of an electronic manifest is accessible during transportation and forwarded to the person or persons who are scheduled to receive delivery of the waste shipment.

(4) Any requirement in these regulations for an owner or operator to keep or retain a copy of each manifest is satisfied by the retention of the facility's electronic manifest copies in its account on the e-Manifest system, provided that such copies are readily available for viewing and production if requested by any EPA or Division of Waste Management and Radiation Control inspector.

(5) No owner or operator may be held liable for the inability to produce an electronic manifest for inspection under Section R315-264-71 if the owner or operator can demonstrate that the inability to produce the electronic manifest is due exclusively to a technical difficulty with the electronic manifest system for which the owner or operator bears no responsibility.

(g) An owner or operator may participate in the electronic manifest system either by accessing the electronic manifest system from the owner's or operator's electronic equipment, or by accessing the electronic manifest system from portable equipment brought to the owner's or operator's site by the transporter who delivers the waste shipment to the facility.

(h) Special procedures applicable to replacement manifests. If a facility receives hazardous waste that is accompanied by a paper replacement manifest for a manifest that was originated electronically, the following procedures apply to the delivery of the hazardous waste by the final transporter:

(1) Upon delivery of the hazardous waste to the designated facility, the owner or operator shall sign and date each copy of the paper replacement manifest by hand in Item 20, Designated Facility Certification of Receipt, and note any discrepancies in Item 18, Discrepancy Indication Space, of the paper replacement manifest,

(2) The owner or operator of the facility shall give back to the final transporter one copy of the paper replacement manifest,

(3) Within 30 days of delivery of the waste to the designated facility, the owner or operator of the facility shall send one signed and dated copy of the paper replacement manifest to the generator, and send an additional signed and dated copy of the paper replacement manifest to the electronic manifest system, and

(4) The owner or operator of the facility shall retain at the facility one copy of the paper replacement manifest for at least three years from the date of delivery.

(i) Special procedures applicable to electronic signature methods undergoing tests. If an owner or operator using an electronic manifest signs this manifest electronically using an electronic signature method which is undergoing pilot or demonstration tests aimed at demonstrating the practicality or legal dependability of the signature method, then the owner or operator shall also sign with an ink signature the facility's certification of receipt or discrepancies on the printed copy of the manifest provided by the transporter. Upon executing its ink

signature on this printed copy, the owner or operator shall retain this original copy among its records for at least 3 years from the date of delivery of the waste.

(j) Imposition of user fee for electronic manifest use. An owner or operator who is a user of the electronic manifest format may be assessed a user fee by EPA for the origination or processing of each electronic manifest. An owner or operator may also be assessed a user fee by EPA for the collection and processing of paper manifest copies that owners or operators shall submit to the electronic manifest system operator under Subsection R315-264-71(a)(2)(v). EPA shall maintain and update from time-to-time the current schedule of electronic manifest system user fees, which shall be determined based on current and projected system costs and level of use of the electronic manifest system. The current schedule of electronic manifest user fees shall be published as an appendix to 40 CFR 262.

(k) Electronic manifest signatures. Electronic manifest signatures shall meet the criteria described in Section R315-262-25.

R315-264-72. Manifest Discrepancies.

(a) Manifest discrepancies are:

(1) Significant differences, as defined by Subsection R315-264-72(b), between the quantity or type of hazardous waste designated on the manifest or shipping paper, and the quantity and type of hazardous waste a facility actually receives;

(2) Rejected wastes, which may be a full or partial shipment of hazardous waste that the treatment, storage, or disposal facility cannot accept; or

(3) Container residues, which are residues that exceed the quantity limits for "empty" containers set forth in Subsection R315-261-7(b).

(b) Significant differences in quantity are: For bulk waste, variations greater than 10 percent in weight; for batch waste, any variation in piece count, such as a discrepancy of one drum in a truckload. Significant differences in type are obvious differences which can be discovered by inspection or waste analysis, such as waste solvent substituted for waste acid, or toxic constituents not reported on the manifest or shipping paper.

(c) Upon discovering a significant difference in quantity or type, the owner or operator shall attempt to reconcile the discrepancy with the waste generator or transporter, e.g., with telephone conversations. If the discrepancy is not resolved within 15 days after receiving the waste, the owner or operator shall immediately submit to the Director a letter describing the discrepancy and attempts to reconcile it, and a copy of the manifest or shipping paper at issue.

(d)(1) Upon rejecting waste or identifying a container residue that exceeds the quantity limits for "empty" containers set forth in Subsection R315-261-7(b), the facility shall consult with the generator prior to forwarding the waste to another facility that can manage the waste. If it is impossible to locate an alternative facility that can receive the waste, the facility may return the rejected waste or residue to the generator. The facility shall send the waste to the alternative facility or to the generator within 60 days of the rejection or the container residue identification.

(2) While the facility is making arrangements for forwarding rejected wastes or residues to another facility under Section R315-264-72, it shall ensure that either the delivering transporter retains custody of the waste, or, the facility shall provide for secure, temporary custody of the waste, pending delivery of the waste to the first transporter designated on the manifest prepared under Subsections R315-264-72(e) or (f).

(e) Except as provided in Subsections R315-264-72(e)(7), for full or partial load rejections and residues that are to be sent off-site to an alternate facility, the facility is required to prepare

a new manifest in accordance with Subsection R315-262-20(a) and the following instructions:

(1) Write the generator's U.S. EPA ID number in Item 1 of the new manifest. Write the generator's name and mailing address in Item 5 of the new manifest. If the mailing address is different from the generator's site address, then write the generator's site address in the designated space for Item 5.

(2) Write the name of the alternate designated facility and the facility's U.S. EPA ID number in the designated facility block, Item 8, of the new manifest.

(3) Copy the manifest tracking number found in Item 4 of the old manifest to the Special Handling and Additional Information Block of the new manifest, and indicate that the shipment is a residue or rejected waste from the previous shipment.

(4) Copy the manifest tracking number found in Item 4 of the new manifest to the manifest reference number line in the Discrepancy Block of the old manifest, Item 18a.

(5) Write the DOT description for the rejected load or the residue in Item 9, U.S. DOT Description, of the new manifest and write the container types, quantity, and volume(s) of waste.

(6) Sign the Generator's/Officer's Certification to certify, as the offeror of the shipment, that the waste has been properly packaged, marked and labeled and is in proper condition for transportation, and mail a signed copy of the manifest to the generator identified in Item 5 of the new manifest.

(7) For full load rejections that are made while the transporter remains present at the facility, the facility may forward the rejected shipment to the alternate facility by completing Item 18b of the original manifest and supplying the information on the next destination facility in the Alternate Facility space. The facility shall retain a copy of this manifest for its records, and then give the remaining copies of the manifest to the transporter to accompany the shipment. If the original manifest is not used, then the facility shall use a new manifest and comply with Subsections R315-264-72(e)(1), (2), (3), (4), (5), and (6).

(f) Except as provided in Subsection R315-264-72(f)(7), for rejected wastes and residues that shall be sent back to the generator, the facility is required to prepare a new manifest in accordance with Subsection R315-262-20(a) and the following instructions:

(1) Write the facility's U.S. EPA ID number in Item 1 of the new manifest. Write the facility's name and mailing address in Item 5 of the new manifest. If the mailing address is different from the facility's site address, then write the facility's site address in the designated space for Item 5 of the new manifest.

(2) Write the name of the initial generator and the generator's U.S. EPA ID number in the designated facility block, Item 8, of the new manifest.

(3) Copy the manifest tracking number found in Item 4 of the old manifest to the Special Handling and Additional Information Block of the new manifest, and indicate that the shipment is a residue or rejected waste from the previous shipment.

(4) Copy the manifest tracking number found in Item 4 of the new manifest to the manifest reference number line in the Discrepancy Block of the old manifest, Item 18a.

(5) Write the DOT description for the rejected load or the residue in Item 9, U.S. DOT Description, of the new manifest and write the container types, quantity, and volume(s) of waste.

(6) Sign the Generator's/Officer's Certification to certify, as offeror of the shipment, that the waste has been properly packaged, marked and labeled and is in proper condition for transportation.

(7) For full load rejections that are made while the transporter remains at the facility, the facility may return the shipment to the generator with the original manifest by completing Item 18a and 18b of the manifest and supplying the

generator's information in the Alternate Facility space. The facility shall retain a copy for its records and then give the remaining copies of the manifest to the transporter to accompany the shipment. If the original manifest is not used, then the facility shall use a new manifest and comply with Subsections R315-264-72(f)(1), (2), (3), (4), (5), (6), and (8).

(8) For full or partial load rejections and container residues contained in non-empty containers that are returned to the generator, the facility shall also comply with the exception reporting requirements in Subsection R315-262-42(a).

(g) If a facility rejects a waste or identifies a container residue that exceeds the quantity limits for "empty" containers set forth in Subsection R315-261-7(b) after it has signed, dated, and returned a copy of the manifest to the delivering transporter or to the generator, the facility shall amend its copy of the manifest to indicate the rejected wastes or residues in the discrepancy space of the amended manifest. The facility shall also copy the manifest tracking number from Item 4 of the new manifest to the Discrepancy space of the amended manifest, and shall re-sign and date the manifest to certify to the information as amended. The facility shall retain the amended manifest for at least three years from the date of amendment, and shall within 30 days, send a copy of the amended manifest to the transporter and generator that received copies prior to their being amended.

R315-264-73. Operating Record.

(a) The owner or operator shall keep a written operating record at his facility.

(b) The following information shall be recorded, as it becomes available, and maintained in the operating record for three years unless noted as follows:

(1) A description and the quantity of each hazardous waste received, and the method(s) and date(s) of its treatment, storage, or disposal at the facility as required by appendix I of Rule R315-264. This information shall be maintained in the operating record until closure of the facility;

(2) The location of each hazardous waste within the facility and the quantity at each location. For disposal facilities, the location and quantity of each hazardous waste shall be recorded on a map or diagram that shows each cell or disposal area. For all facilities, this information shall include cross-references to manifest document numbers if the waste was accompanied by a manifest. This information shall be maintained in the operating record until closure of the facility. See Section R315-264-119 for related requirements.

(3) Records and results of waste analyses and waste determinations performed as specified in Sections R315-264-13, 17, 314, 341, 1034, 1063, 1083, and 268-7, and Subsection R315-268-4(a).

(4) Summary reports and details of all incidents that require implementing the contingency plan as specified in Subsection R315-264-56(j);

(5) Records and results of inspections as required by Subsection R315-264-15(d), except these data need be kept only three years;

(6) Monitoring, testing or analytical data, and corrective action where required by Sections R315-264-90 through 101, and Sections R315-264-19, 191, 193, 195, 222, 223, 226, 252, 254, 276, 278, 280, 302, 304, 309, 602, 1035, 1064, and 1082 through 1090 and Subsections R315-264-1034(c), 1034(f), 1063(d), and 1063(i). Maintain in the operating record for three years, except for records and results pertaining to ground-water monitoring and cleanup which shall be maintained in the operating record until closure of the facility.

(7) For off-site facilities, notices to generators as specified in Subsection R315-264-12(b); and

(8) All closure cost estimates under Section R315-264-142, and for disposal facilities, all post-closure cost estimates under Section R315-264-144. This information shall be

maintained in the operating record until closure of the facility.

(9) A certification by the permittee no less often than annually, that the permittee has a program in place to reduce the volume and toxicity of hazardous waste that he generates to the degree determined by the permittee to be economically practicable; and the proposed method of treatment, storage or disposal is that practicable method currently available to the permittee which minimizes the present and future threat to human health and the environment.

(10) Records of the quantities and date of placement for each shipment of hazardous waste placed in land disposal units under an extension to the effective date of any land disposal restriction granted pursuant to Section R315-268-5, a petition pursuant to Section R315-268-6, or a certification under R315-268-8, and the applicable notice required by a generator under Subsection R315-268-7(a). This information shall be maintained in the operating record until closure of the facility.

(11) For an off-site treatment facility, a copy of the notice, and the certification and demonstration, if applicable, required by the generator or the owner or operator under Sections R315-268-7 or 8;

(12) For an on-site treatment facility, the information contained in the notice, except the manifest number, and the certification and demonstration if applicable, required by the generator or the owner or operator under Sections R315-268-7 or 8;

(13) For an off-site land disposal facility, a copy of the notice, and the certification and demonstration if applicable, required by the generator or the owner or operator of a treatment facility under Sections R315-268-7 or 8, whichever is applicable; and

(14) For an on-site land disposal facility, the information contained in the notice required by the generator or owner or operator of a treatment facility under Section R315-268-7, except for the manifest number, and the certification and demonstration if applicable, required under Section R315-268-8, whichever is applicable.

(15) For an off-site storage facility, a copy of the notice, and the certification and demonstration if applicable, required by the generator or the owner or operator under Sections R315-268-7 or 8; and

(16) For an on-site storage facility, the information contained in the notice, except the manifest number, and the certification and demonstration if applicable, required by the generator or the owner or operator under Sections R315-268-7 or 8.

(17) Any records required under Subsection R315-264-1(j)(13).

(18) Monitoring, testing or analytical data where required by Section R315-264-347 shall be maintained in the operating record for five years.

(19) Certifications as required by Subsection R315-264-196(f) shall be maintained in the operating record until closure of the facility.

R315-264-74. Availability, Retention, and Disposition of Records.

(a) All records, including plans, required under Rule R315-264 shall be furnished upon request, and made available at all reasonable times for inspection, by any officer, employee, or representative of EPA who is duly designated by the Administrator, or any designated representative of the Director.

(b) The retention period for all records required under Rule R315-264 is extended automatically during the course of any unresolved enforcement action regarding the facility or as requested by the Director.

(c) A copy of records of waste disposal locations and quantities under Subsection R315-264-73(b)(2) shall be submitted to the Director and local land authority upon closure

of the facility.

R315-264-75. Manifest System, Recordkeeping, and Reporting -- Biennial Report.

The owner or operator shall complete and submit EPA Form 8700-13 A/B to the Director by March 1 of the following even numbered year and shall cover activities during the previous year.

R315-264-76. Unmanifested Waste Report.

(a) If a facility accepts for treatment, storage, or disposal any hazardous waste from an off-site source without an accompanying manifest, or without an accompanying shipping paper as described by Subsection R315-263-20(e), and if the waste is not excluded from the manifest requirement by Rules R315-260, through 266, 268, 270, and 273 then the owner or operator shall prepare and submit a letter to the Director within 15 days after receiving the waste. The unmanifested waste report shall contain the following information:

- (1) The EPA identification number, name and address of the facility;
- (2) The date the facility received the waste;
- (3) The EPA identification number, name and address of the generator and the transporter, if available;
- (4) A description and the quantity of each unmanifested hazardous waste the facility received;
- (5) The method of treatment, storage, or disposal for each hazardous waste;
- (6) The certification signed by the owner or operator of the facility or his authorized representative; and,
- (7) A brief explanation of why the waste was unmanifested, if known.

R315-264-77. Additional Reports.

In addition to submitting the biennial reports and unmanifested waste reports described in Sections R315-264-75 and 76, the owner or operator shall also report to the Director:

- (a) Releases, fires, and explosions as specified in Subsection R315-264-56(j);
- (b) Facility closures specified in Section R315-264-115; and
- (c) As otherwise required by Sections R315-264-90 through 101, 220 through 232, 250 through 259, 270 through 283, 300 through 317, 1030 through 1049, 1050 through 1079, and 1080 through 1091.

R315-264-90. Releases From Solid Waste Management Units -- Applicability.

(a)(1) Except as provided in Subsection R315-264-90 (b), the regulations in Sections R315-264-90 through 101 apply to owners or operators of facilities that treat, store or dispose of hazardous waste. The owner or operator shall satisfy the requirements identified in Subsection R315-264-90(a)(2) for all wastes, or constituents thereof, contained in solid waste management units at the facility, regardless of the time at which waste was placed in such units.

(2) All solid waste management units shall comply with the requirements in Section R315-264-101. A surface impoundment, waste pile, and land treatment unit or landfill that receives hazardous waste after July 26, 1982, hereinafter referred to as a "regulated unit", shall comply with the requirements of Sections R315-264-91 through 100 in lieu of Section R315-264-101 for purposes of detecting, characterizing and responding to releases to the uppermost aquifer. The financial responsibility requirements of Section R315-264-101 apply to regulated units.

(3) Groundwater monitoring shall be required at non-land disposal facilities as determined to be necessary and appropriate by the Director.

(b) The owner or operator's regulated unit or units are not subject to regulation for releases into the uppermost aquifer under Sections R315-264-90 through 101 if:

- (1) The owner or operator is exempted under Section R315-264-1; or
- (2) He operates a unit which the Director finds:
 - (i) Is an engineered structure,
 - (ii) Does not receive or contain liquid waste or waste containing free liquids,
 - (iii) Is designed and operated to exclude liquid, precipitation, and other run-on and run-off,
 - (iv) Has both inner and outer layers of containment enclosing the waste,
 - (v) Has a leak detection system built into each containment layer,
 - (vi) The owner or operator shall provide continuing operation and maintenance of these leak detection systems during the active life of the unit and the closure and post-closure care periods, and
 - (vii) To a reasonable degree of certainty, will not allow hazardous constituents to migrate beyond the outer containment layer prior to the end of the post-closure care period.

(3) The Director finds, pursuant to Section R315-264-280(d), that the treatment zone of a land treatment unit that qualifies as a regulated unit does not contain levels of hazardous constituents that are above background levels of those constituents by an amount that is statistically significant, and if an unsaturated zone monitoring program meeting the requirements of Section R35-264-278 has not shown a statistically significant increase in hazardous constituents below the treatment zone during the operating life of the unit. An exemption under Subsection R315-264-90(b) can only relieve an owner or operator of responsibility to meet the requirements of Sections R315-264-90 through 101 during the post-closure care period; or

(4) The Director finds that there is no potential for migration of liquid from a regulated unit to the uppermost aquifer during the active life of the regulated unit, including the closure period, and the post-closure care period specified under Section R315-264-117. This demonstration shall be certified by a qualified geologist or geotechnical engineer. In order to provide an adequate margin of safety in the prediction of potential migration of liquid, the owner or operator shall base any predictions made under Subsection R315-264-90(b) on assumptions that maximize the rate of liquid migration.

(5) He designs and operates a pile in compliance with Section R315-264-250(c).

(c) The regulations under Sections R315-264-90 through 101 apply during the active life of the regulated unit, including the closure period. After closure of the regulated unit, the regulations in Sections R315-264-90 through 101:

- (1) Do not apply if all waste, waste residues, contaminated containment system components, and contaminated subsoils are removed or decontaminated at closure;
- (2) Apply during the post-closure care period under Section R315-264-117 if the owner or operator is conducting a detection monitoring program under Section R315-264-98; or
- (3) Apply during the compliance period under Section R315-264-96 if the owner or operator is conducting a compliance monitoring program under Section R315-264-99 or a corrective action program under Section R315-264-100.
- (d) Regulations in Sections R315-264-90 through 101 may apply to miscellaneous units when necessary to comply with Sections R315-264-601 through 603.

(e) The regulations of Sections R315-264-90 through 101 apply to all owners and operators subject to the requirements of Subsection R315-270-1(c)(7), when the Agency issues either a post-closure permit or an enforceable document, as defined in Subsection R315-270-1(c)(7) at the facility. When the Director

issues an enforceable document, references in Sections R315-264-90 through 101 to "in the permit" mean "in the enforceable document."

(f) The Director may replace all or part of the requirements of Sections R315-264-91 through 100 applying to a regulated unit with alternative requirements for groundwater monitoring and corrective action for releases to groundwater set out in the permit, or in an enforceable document, as defined in Subsection R315-270-1(c)(7), where the Director determines that:

(1) The regulated unit is situated among solid waste management units, or areas of concern, a release has occurred, and both the regulated unit and one or more solid waste management unit(s), or areas of concern, are likely to have contributed to the release; and

(2) It is not necessary to apply the groundwater monitoring and corrective action requirements of Sections R315-264-91 through 100 because alternative requirements will protect human health and the environment.

R315-264-91. Required Programs.

(a) Owners and operators subject to Sections R315-264-90 through 101 shall conduct a monitoring and response program as follows:

(1) Whenever hazardous constituents under Section R315-264-93 from a regulated unit are detected at a compliance point under Section R315-264-95, the owner or operator shall institute a compliance monitoring program under Section R315-264-99. Detected is defined as statistically significant evidence of contamination as described in Subsection R315-264-98(f);

(2) Whenever the ground-water protection standard under Section R315-264-92 is exceeded, the owner or operator shall institute a corrective action program under Section R315-264-100. Exceeded is defined as statistically significant evidence of increased contamination as described in Subsection R315-264-99(d);

(3) Whenever hazardous constituents under Section R315-264-93 from a regulated unit exceed concentration limits under Section R315-264-94 in ground water between the compliance point under Section R315-264-95 and the downgradient facility property boundary, the owner or operator shall institute a corrective action program under Section R315-264-100; or

(4) In all other cases, the owner or operator shall institute a detection monitoring program under Section R315-264-98.

(b) The Director shall specify in the facility permit the specific elements of the monitoring and response program. The Director may include one or more of the programs identified in Subsection R315-264-91(a) in the facility permit as may be necessary to protect human health and the environment and will specify the circumstances under which each of the programs will be required. In deciding whether to require the owner or operator to be prepared to institute a particular program, the Director shall consider the potential adverse effects on human health and the environment that might occur before final administrative action on a permit modification application to incorporate such a program could be taken.

R315-264-92. Ground-Water Protection Standard.

The owner or operator shall comply with conditions specified in the facility permit that are designed to ensure that hazardous constituents under Section R315-264-93 detected in the ground water from a regulated unit do not exceed the concentration limits under Section R315-264-94 in the uppermost aquifer underlying the waste management area beyond the point of compliance under Section R315-264-95 during the compliance period under Section R315-264-96. The Director shall establish this ground-water protection standard in the facility permit when hazardous constituents have been detected in the ground water.

R315-264-93. Hazardous Constituents.

(a) The Director shall specify in the facility permit the hazardous constituents to which the ground-water protection standard of Section R315-264-92 applies. Hazardous constituents are constituents identified in appendix VIII of Rule R315-261 that have been detected in ground water in the uppermost aquifer underlying a regulated unit and that are reasonably expected to be in or derived from waste contained in a regulated unit, unless the Director has excluded them under Subsection R315-264-93(b).

(b) The Director shall exclude a Rule R315-261 appendix VIII constituent from the list of hazardous constituents specified in the facility permit if he finds that the constituent is not capable of posing a substantial present or potential hazard to human health or the environment. In deciding whether to grant an exemption, the Director shall consider the following:

(1) Potential adverse effects on ground-water quality, considering:

(i) The physical and chemical characteristics of the waste in the regulated unit, including its potential for migration;

(ii) The hydrogeological characteristics of the facility and surrounding land;

(iii) The quantity of ground water and the direction of ground-water flow;

(iv) The proximity and withdrawal rates of ground-water users;

(v) The current and future uses of ground water in the area;

(vi) The existing quality of ground water, including other sources of contamination and their cumulative impact on the ground-water quality;

(vii) The potential for health risks caused by human exposure to waste constituents;

(viii) The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents;

(ix) The persistence and permanence of the potential adverse effects; and

(2) Potential adverse effects on hydraulically-connected surface water quality, considering:

(i) The volume and physical and chemical characteristics of the waste in the regulated unit;

(ii) The hydrogeological characteristics of the facility and surrounding land;

(iii) The quantity and quality of ground water, and the direction of ground-water flow;

(iv) The patterns of rainfall in the region;

(v) The proximity of the regulated unit to surface waters;

(vi) The current and future uses of surface waters in the area and any water quality standards established for those surface waters;

(vii) The existing quality of surface water, including other sources of contamination and the cumulative impact on surface-water quality;

(viii) The potential for health risks caused by human exposure to waste constituents;

(ix) The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents; and

(x) The persistence and permanence of the potential adverse effects.

(c) In making any determination under Subsection R315-264-93(b) about the use of ground water in the area around the facility, the Director shall consider any identification of underground sources of drinking water and exempted aquifers made under 40 CFR 144.8.

R315-264-94. Concentration Limits.

(a) The Director shall specify in the facility permit

concentration limits in the ground water for hazardous constituents established under Section R315-264-93. The concentration of a hazardous constituent:

(1) Shall not exceed the background level of that constituent in the ground water at the time that limit is specified in the permit; or

(2) For any of the constituents listed in Table 1, shall not exceed the respective value given in that table if the background level of the constituent is below the value given in Table 1; or

Table 1

Maximum Concentration of Constituents for Ground-water Protection

Constituent	Maximum concentration (1)
Arsenic	0.05
Barium	1.0
Cadmium	0.01
Chromium	0.05
Lead	0.05
Mercury	0.002
Selenium	0.01
Silver	0.05
Endrin (1,2,3,4,10,10-hexachloro-1,7-epoxy 1,4,4a,5,6,7,8,9a-octahydro-1, 4-endo, endo-5,8-dimethano naphthalene)	0.0002
Lindane (1,2,3,4,5,6-hexachlorocyclohexane, gamma isomer)	0.004
Methoxychlor (1,1,1-Trichloro-2,2-bis (p-methoxyphenylethane)	0.1
Toxaphene (C10H10Cl6, Technical chlorinated camphene, 67-69 percent chlorine)	0.005
2,4-D (2,4-Dichlorophenoxyacetic acid)	0.1
2,4,5-TP Silvex (2,4,5-Trichlorophenoxypropionic acid)	0.01

(1) Milligrams per liter.

(3) Shall not exceed an alternate limit established by the Director under Subsection R315-264-94(b).

(b) The Director shall establish an alternate concentration limit for a hazardous constituent if he finds that the constituent will not pose a substantial present or potential hazard to human health or the environment as long as the alternate concentration limit is not exceeded. In establishing alternate concentration limits, the Director shall consider the following factors:

(1) Potential adverse effects on ground-water quality, considering:

(i) The physical and chemical characteristics of the waste in the regulated unit, including its potential for migration;

(ii) The hydrogeological characteristics of the facility and surrounding land;

(iii) The quantity of ground water and the direction of ground-water flow;

(iv) The proximity and withdrawal rates of ground-water users;

(v) The current and future uses of ground water in the area;

(vi) The existing quality of ground water, including other sources of contamination and their cumulative impact on the ground-water quality;

(vii) The potential for health risks caused by human exposure to waste constituents;

(viii) The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents;

(ix) The persistence and permanence of the potential adverse effects; and

(2) Potential adverse effects on hydraulically-connected surface-water quality, considering:

(i) The volume and physical and chemical characteristics of the waste in the regulated unit;

(ii) The hydrogeological characteristics of the facility and surrounding land;

(iii) The quantity and quality of ground water, and the direction of ground-water flow;

(iv) The patterns of rainfall in the region;

(v) The proximity of the regulated unit to surface waters;

(vi) The current and future uses of surface waters in the area and any water quality standards established for those surface waters;

(vii) The existing quality of surface water, including other sources of contamination and the cumulative impact on surface water quality;

(viii) The potential for health risks caused by human exposure to waste constituents;

(ix) The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents; and

(x) The persistence and permanence of the potential adverse effects.

(c) In making any determination under Subsection R315-264-94(b) about the use of ground water in the area around the facility the Director shall consider any identification of underground sources of drinking water and exempted aquifers made under 40 CFR 144.7.

R315-264-95. Point of Compliance.

(a) The Director shall specify in the facility permit the point of compliance at which the ground-water protection standard of Section R315-264-92 applies and at which monitoring shall be conducted. The point of compliance is a vertical surface located at the hydraulically downgradient limit of the waste management area that extends down into the uppermost aquifer underlying the regulated units.

(b) The waste management area is the limit projected in the horizontal plane of the area on which waste will be placed during the active life of a regulated unit.

(1) The waste management area includes horizontal space taken up by any liner, dike, or other barrier designed to contain waste in a regulated unit.

(2) If the facility contains more than one regulated unit, the waste management area is described by an imaginary line circumscribing the several regulated units.

R315-264-96. Compliance Period.

(a) The Director shall specify in the facility permit the compliance period during which the ground-water protection standard of Section R315-264-92 applies. The compliance period is the number of years equal to the active life of the waste management area, including any waste management activity prior to permitting, and the closure period.

(b) The compliance period begins when the owner or operator initiates a compliance monitoring program meeting the requirements of Section R315-264-99.

(c) If the owner or operator is engaged in a corrective action program at the end of the compliance period specified in Subsection R316-264-96(a), the compliance period is extended until the owner or operator can demonstrate that the ground-water protection standard of Section R315-264-92 has not been exceeded for a period of three consecutive years.

R315-264-97. General Ground-Water Monitoring Requirements.

The owner or operator shall comply with the following requirements for any ground-water monitoring program developed to satisfy Sections R315-264-98 through 100:

(a) The ground-water monitoring system shall consist of a sufficient number of wells, installed at appropriate locations and depths to yield ground-water samples from the uppermost aquifer that:

(1) Represent the quality of background ground water that has not been affected by leakage from a regulated unit;

(i) A determination of background ground-water quality may include sampling of wells that are not hydraulically upgradient of the waste management area where:

(A) Hydrogeologic conditions do not allow the owner or operator to determine what wells are hydraulically upgradient; and

(B) Sampling at other wells will provide an indication of background ground-water quality that is representative or more representative than that provided by the upgradient wells; and

(2) Represent the quality of ground water passing the point of compliance.

(3) Allow for the detection of contamination when hazardous waste or hazardous constituents have migrated from the waste management area to the uppermost aquifer.

(b) If a facility contains more than one regulated unit, separate ground-water monitoring systems are not required for each regulated unit provided that provisions for sampling the ground water in the uppermost aquifer will enable detection and measurement at the compliance point of hazardous constituents from the regulated units that have entered the ground water in the uppermost aquifer.

(c) All monitoring wells shall be cased in a manner that maintains the integrity of the monitoring-well bore hole. This casing shall be screened or perforated and packed with gravel or sand, where necessary, to enable collection of ground-water samples. The annular space, i.e., the space between the bore hole and well casing, above the sampling depth shall be sealed to prevent contamination of samples and the ground water.

(d) The ground-water monitoring program shall include consistent sampling and analysis procedures that are designed to ensure monitoring results that provide a reliable indication of ground-water quality below the waste management area. At a minimum the program shall include procedures and techniques for:

- (1) Sample collection;
- (2) Sample preservation and shipment;
- (3) Analytical procedures; and
- (4) Chain of custody control.

(e) The ground-water monitoring program shall include sampling and analytical methods that are appropriate for ground-water sampling and that accurately measure hazardous constituents in ground-water samples.

(f) The ground-water monitoring program shall include a determination of the ground-water surface elevation each time ground water is sampled.

(g) In detection monitoring or where appropriate in compliance monitoring, data on each hazardous constituent specified in the permit will be collected from background wells and wells at the compliance point(s). The number and kinds of samples collected to establish background shall be appropriate for the form of statistical test employed, following generally accepted statistical principles. The sample size shall be as large as necessary to ensure with reasonable confidence that a contaminant release to ground water from a facility will be detected. The owner or operator shall determine an appropriate sampling procedure and interval for each hazardous constituent listed in the facility permit which shall be specified in the unit permit upon approval by the Director. This sampling procedure shall be:

(1) A sequence of at least four samples, taken at an interval that assures, to the greatest extent technically feasible, that an independent sample is obtained, by reference to the uppermost aquifer's effective porosity, hydraulic conductivity, and hydraulic gradient, and the fate and transport characteristics of the potential contaminants, or

(2) An alternate sampling procedure proposed by the owner or operator and approved by the Director.

(h) The owner or operator shall specify one of the following statistical methods to be used in evaluating ground-

water monitoring data for each hazardous constituent which, upon approval by the Director, shall be specified in the unit permit. The statistical test chosen shall be conducted separately for each hazardous constituent in each well. Where practical quantification limits (pql's) are used in any of the following statistical procedures to comply with Subsection R315-264-97(i)(5), the pql shall be proposed by the owner or operator and approved by the Director. Use of any of the following statistical methods shall be protective of human health and the environment and shall comply with the performance standards outlined in Subsection R315-264-97(i).

(1) A parametric analysis of variance, ANOVA, followed by multiple comparisons procedures to identify statistically significant evidence of contamination. The method shall include estimation and testing of the contrasts between each compliance well's mean and the background mean levels for each constituent.

(2) An analysis of variance, ANOVA, based on ranks followed by multiple comparisons procedures to identify statistically significant evidence of contamination. The method shall include estimation and testing of the contrasts between each compliance well's median and the background median levels for each constituent.

(3) A tolerance or prediction interval procedure in which an interval for each constituent is established from the distribution of the background data, and the level of each constituent in each compliance well is compared to the upper tolerance or prediction limit.

(4) A control chart approach that gives control limits for each constituent.

(5) Another statistical test method submitted by the owner or operator and approved by the Director.

(i) Any statistical method chosen under Subsection R315-264-97(h) for specification in the unit permit shall comply with the following performance standards, as appropriate:

(1) The statistical method used to evaluate ground-water monitoring data shall be appropriate for the distribution of chemical parameters or hazardous constituents. If the distribution of the chemical parameters or hazardous constituents is shown by the owner or operator to be inappropriate for a normal theory test, then the data should be transformed or a distribution-free theory test should be used. If the distributions for the constituents differ, more than one statistical method may be needed.

(2) If an individual well comparison procedure is used to compare an individual compliance well constituent concentration with background constituent concentrations or a ground-water protection standard, the test shall be done at a Type I error level no less than 0.01 for each testing period. If a multiple comparisons procedure is used, the Type I experimentwise error rate for each testing period shall be no less than 0.05; however, the Type I error of no less than 0.01 for individual well comparisons shall be maintained. This performance standard does not apply to tolerance intervals, prediction intervals or control charts.

(3) If a control chart approach is used to evaluate ground-water monitoring data, the specific type of control chart and its associated parameter values shall be proposed by the owner or operator and approved by the Director if he or she finds it to be protective of human health and the environment.

(4) If a tolerance interval or a prediction interval is used to evaluate groundwater monitoring data, the levels of confidence and, for tolerance intervals, the percentage of the population that the interval shall contain, shall be proposed by the owner or operator and approved by the Director if he or she finds these parameters to be protective of human health and the environment. These parameters shall be determined after considering the number of samples in the background data base, the data distribution, and the range of the concentration values

for each constituent of concern.

(5) The statistical method shall account for data below the limit of detection with one or more statistical procedures that are protective of human health and the environment. Any practical quantification limit (pql) approved by the Director under Subsection R315-264-97(h) that is used in the statistical method shall be the lowest concentration level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions that are available to the facility.

(6) If necessary, the statistical method shall include procedures to control or correct for seasonal and spatial variability as well as temporal correlation in the data.

(j) Ground-water monitoring data collected in accordance with Subsection R315-264-97(g) including actual levels of constituents shall be maintained in the facility operating record. The Director shall specify in the permit when the data shall be submitted for review.

R315-264-98. Detection Monitoring Program.

An owner or operator required to establish a detection monitoring program under Sections R315-264-90 through 101 shall, at a minimum, discharge the following responsibilities:

(a) The owner or operator shall monitor for indicator parameters, e.g., specific conductance, total organic carbon, or total organic halogen, waste constituents, or reaction products that provide a reliable indication of the presence of hazardous constituents in ground water. The Director shall specify the parameters or constituents to be monitored in the facility permit, after considering the following factors:

(1) The types, quantities, and concentrations of constituents in wastes managed at the regulated unit;

(2) The mobility, stability, and persistence of waste constituents or their reaction products in the unsaturated zone beneath the waste management area;

(3) The detectability of indicator parameters, waste constituents, and reaction products in ground water; and

(4) The concentrations or values and coefficients of variation of proposed monitoring parameters or constituents in the ground-water background.

(b) The owner or operator shall install a ground-water monitoring system at the compliance point as specified under Section R315-264-95. The ground-water monitoring system shall comply with Subsections R315-264-97(a)(2), (b), and (c).

(c) The owner or operator shall conduct a ground-water monitoring program for each chemical parameter and hazardous constituent specified in the permit pursuant to Subsection R315-264-98(a) in accordance with Section R315-264-97(g). The owner or operator shall maintain a record of ground-water analytical data as measured and in a form necessary for the determination of statistical significance under Subsection R315-264-97(h).

(d) The Director shall specify the frequencies for collecting samples and conducting statistical tests to determine whether there is statistically significant evidence of contamination for any parameter or hazardous constituent specified in the permit conditions under Subsection R315-264-98(a) in accordance with Subsection R315-264-97(g).

(e) The owner or operator shall determine the ground-water flow rate and direction in the uppermost aquifer at least annually.

(f) The owner or operator shall determine whether there is statistically significant evidence of contamination for any chemical parameter of hazardous constituent specified in the permit pursuant to Subsection R315-264-98(a) at a frequency specified under Subsection R315-264-98(d).

(1) In determining whether statistically significant evidence of contamination exists, the owner or operator shall use the method(s) specified in the permit under Subsection

R315-264-97(h). These method(s) shall compare data collected at the compliance point(s) to the background ground-water quality data.

(2) The owner or operator shall determine whether there is statistically significant evidence of contamination at each monitoring well as the compliance point within a reasonable period of time after completion of sampling. The Director shall specify in the facility permit what period of time is reasonable, after considering the complexity of the statistical test and the availability of laboratory facilities to perform the analysis of ground-water samples.

(g) If the owner or operator determines pursuant to Subsection R315-264-98(f) that there is statistically significant evidence of contamination for chemical parameters or hazardous constituents specified pursuant to Subsection R315-264-98(a) at any monitoring well at the compliance point, he or she shall:

(1) Notify the Director of this finding in writing within seven days. The notification shall indicate what chemical parameters or hazardous constituents have shown statistically significant evidence of contamination;

(2) Immediately sample the ground water in all monitoring wells and determine whether constituents in the list of appendix IX of Rule R315-264 are present, and if so, in what concentration. However, the Director, on a discretionary basis, may allow sampling for a site-specific subset of constituents from the appendix IX list of Rule R315-264 and other representative/related waste constituents.

(3) For any appendix IX compounds found in the analysis pursuant to Subsection R315-264-98(g)(2), the owner or operator may resample within one month or at an alternative site-specific schedule approved by the Director and repeat the analysis for those compounds detected. If the results of the second analysis confirm the initial results, then these constituents shall form the basis for compliance monitoring. If the owner or operator does not resample for the compounds in Subsection R315-264-98(g)(2), the hazardous constituents found during this initial appendix IX analysis shall form the basis for compliance monitoring.

(4) Within 90 days, submit to the Director an application for a permit modification to establish a compliance monitoring program meeting the requirements of Section R315-264-99. The application shall include the following information:

(i) An identification of the concentration of any appendix IX constituent detected in the ground water at each monitoring well at the compliance point;

(ii) Any proposed changes to the ground-water monitoring system at the facility necessary to meet the requirements of Section R315-264-99;

(iii) Any proposed additions or changes to the monitoring frequency, sampling and analysis procedures or methods, or statistical methods used at the facility necessary to meet the requirements of Section R315-264-99;

(iv) For each hazardous constituent detected at the compliance point, a proposed concentration limit under Subsections R315-264-94(a)(1) or (2), or a notice of intent to seek an alternate concentration limit under Subsection R315-264-94(b); and

(5) Within 180 days, submit to the Director:

(i) All data necessary to justify an alternate concentration limit sought under Subsection R315-264-94(b); and

(ii) An engineering feasibility plan for a corrective action program necessary to meet the requirement of Section R315-264-100, unless:

(A) All hazardous constituents identified under Subsection R315-264-98(g)(2) are listed in Table 1 of Section R315-264-94 and their concentrations do not exceed the respective values given in that Table; or

(B) The owner or operator has sought an alternate concentration limit under Subsection R315-264-94(b) for every

hazardous constituent identified under Subsection R315-264-98(g)(2).

(6) If the owner or operator determines, pursuant to Subsection R315-264-98(f), that there is a statistically significant difference for chemical parameters or hazardous constituents specified pursuant to Subsection R315-264-98(a) at any monitoring well at the compliance point, he or she may demonstrate that a source other than a regulated unit caused the contamination or that the detection is an artifact caused by an error in sampling, analysis, or statistical evaluation or natural variation in the ground water. The owner operator may make a demonstration under Subsection R315-264-98(g) in addition to, or in lieu of, submitting a permit modification application under Subsection R315-264-98(g)(4); however, the owner or operator is not relieved of the requirement to submit a permit modification application within the time specified in Subsection R315-264-98(g)(4) unless the demonstration made under Subsection R315-264-98(g) successfully shows that a source other than a regulated unit caused the increase, or that the increase resulted from error in sampling, analysis, or evaluation. In making a demonstration under Subsection R315-264-98(g), the owner or operator shall:

(i) Notify the Director in writing within seven days of determining statistically significant evidence of contamination at the compliance point that he intends to make a demonstration under Subsection R315-264-98(g);

(ii) Within 90 days, submit a report to the Director which demonstrates that a source other than a regulated unit caused the contamination or that the contamination resulted from error in sampling, analysis, or evaluation;

(iii) Within 90 days, submit to the Director an application for a permit modification to make any appropriate changes to the detection monitoring program facility; and

(iv) Continue to monitor in accordance with the detection monitoring program established under Section R315-264-98.

(h) If the owner or operator determines that the detection monitoring program no longer satisfies the requirements of Section R315-264-98, he or she shall, within 90 days, submit an application for a permit modification to make any appropriate changes to the program.

R315-264-99. Compliance Monitoring Program.

An owner or operator required to establish a compliance monitoring program under Sections R315-264-90 through 101 shall, at a minimum, discharge the following responsibilities:

(a) The owner or operator shall monitor the ground water to determine whether regulated units are in compliance with the ground-water protection standard under Section R315-264-92. The Director shall specify the ground-water protection standard in the facility permit, including:

(1) A list of the hazardous constituents identified under Section R315-264-93;

(2) Concentration limits under Section R315-264-94 for each of those hazardous constituents;

(3) The compliance point under Section R315-264-95; and

(4) The compliance period under Section R315-264-96.

(b) The owner or operator shall install a ground-water monitoring system at the compliance point as specified under Section R315-264-95. The ground-water monitoring system shall comply with Subsections R315-264-97(a)(2), (b), and (c).

(c) The Director shall specify the sampling procedures and statistical methods appropriate for the constituents and the facility, consistent with Subsections R315-264-97(g) and (h).

(1) The owner or operator shall conduct a sampling program for each chemical parameter or hazardous constituent in accordance with Subsection R315-264-97(g).

(2) The owner or operator shall record ground-water analytical data as measured and in form necessary for the determination of statistical significance under Subsection R315-

264-97(h) for the compliance period of the facility.

(d) The owner or operator shall determine whether there is statistically significant evidence of increased contamination for any chemical parameter or hazardous constituent specified in the permit, pursuant to Subsection R315-264-99(a), at a frequency specified under Subsection R315-264-99(f).

(1) In determining whether statistically significant evidence of increased contamination exists, the owner or operator shall use the method(s) specified in the permit under Subsection R315-264-97(h). The method(s) shall compare data collected at the compliance point(s) to a concentration limit developed in accordance with Section R315-264-94.

(2) The owner or operator shall determine whether there is statistically significant evidence of increased contamination at each monitoring well at the compliance point within a reasonable time period after completion of sampling. The Director shall specify that time period in the facility permit, after considering the complexity of the statistical test and the availability of laboratory facilities to perform the analysis of ground-water samples.

(e) The owner or operator shall determine the ground-water flow rate and direction in the uppermost aquifer at least annually.

(f) The Director shall specify the frequencies for collecting samples and conducting statistical tests to determine statistically significant evidence of increased contamination in accordance with Subsection R315-264-97(g).

(g) Annually, the owner or operator shall determine whether additional hazardous constituents from appendix IX of Rule R315-264, which could possibly be present but are not on the detection monitoring list in the permit, are actually present in the uppermost aquifer and, if so, at what concentration, pursuant to procedures in Subsection R315-264-98(f). To accomplish this, the owner or operator shall consult with the Director to determine on a case-by-case basis: which sample collection event during the year will involve enhanced sampling; the number of monitoring wells at the compliance point to undergo enhanced sampling; the number of samples to be collected from each of these monitoring wells; and, the specific constituents from appendix IX of Rule R315-264 for which these samples shall be analyzed. If the enhanced sampling event indicates that appendix IX constituents are present in the ground water that are not already identified in the permit as monitoring constituents, the owner or operator may resample within one month or at an alternative site-specific schedule approved by the Director, and repeat the analysis. If the second analysis confirms the presence of new constituents, the owner or operator shall report the concentration of these additional constituents to the Director within seven days after the completion of the second analysis and add them to the monitoring list. If the owner or operator chooses not to resample, then he or she shall report the concentrations of these additional constituents to the Director within seven days after completion of the initial analysis, and add them to the monitoring list.

(h) If the owner or operator determines pursuant to Subsection R315-264-99(d) that any concentration limits under Section R315-264-94 are being exceeded at any monitoring well at the point of compliance he or she shall:

(1) Notify the Director of this finding in writing within seven days. The notification shall indicate what concentration limits have been exceeded.

(2) Submit to the Director an application for a permit modification to establish a corrective action program meeting the requirements of Section R315-264-100 within 180 days, or within 90 days if an engineering feasibility study has been previously submitted to the Director under Subsection R315-264-98(g)(5). The application shall at a minimum include the following information:

(i) A detailed description of corrective actions that will achieve compliance with the ground-water protection standard specified in the permit under Subsection R315-264-99(a); and

(ii) A plan for a ground-water monitoring program that will demonstrate the effectiveness of the corrective action. Such a ground-water monitoring program may be based on a compliance monitoring program developed to meet the requirements of Section R315-264-99.

(i) If the owner or operator determines, pursuant to Subsection R315-264-99(d), that the ground-water concentration limits under Section R315-264-99 are being exceeded at any monitoring well at the point of compliance, he or she may demonstrate that a source other than a regulated unit caused the contamination or that the detection is an artifact caused by an error in sampling, analysis, or statistical evaluation or natural variation in the ground water. In making a demonstration under Subsection R315-264-99(h), the owner or operator shall:

(1) Notify the Director in writing within seven days that he intends to make a demonstration under Subsection R315-264-99(h);

(2) Within 90 days, submit a report to the Director which demonstrates that a source other than a regulated unit caused the standard to be exceeded or that the apparent noncompliance with the standards resulted from error in sampling, analysis, or evaluation;

(3) Within 90 days, submit to the Director an application for a permit modification to make any appropriate changes to the compliance monitoring program at the facility; and

(4) Continue to monitor in accord with the compliance monitoring program established under Section R315-264-99.

(j) If the owner or operator determines that the compliance monitoring program no longer satisfies the requirements of Section R315-264-99, he shall, within 90 days, submit an application for a permit modification to make any appropriate changes to the program.

R315-264-100. Corrective Action Program.

An owner or operator required to establish a corrective action program under Sections R315-264-90 through 101 shall, at a minimum, discharge the following responsibilities:

(a) The owner or operator shall take corrective action to ensure that regulated units are in compliance with the ground-water protection standard under Section R315-264-92. The Director shall specify the ground-water protection standard in the facility permit, including:

(1) A list of the hazardous constituents identified under Section R315-264-93;

(2) Concentration limits under Section R315-264-94 for each of those hazardous constituents;

(3) The compliance point under Section R315-264-95; and

(4) The compliance period under Section R315-264-96.

(b) The owner or operator shall implement a corrective action program that prevents hazardous constituents from exceeding their respective concentration limits at the compliance point by removing the hazardous waste constituents or treating them in place. The permit shall specify the specific measures that will be taken.

(c) The owner or operator shall begin corrective action within a reasonable time period after the ground-water protection standard is exceeded. The Director shall specify that time period in the facility permit. If a facility permit includes a corrective action program in addition to a compliance monitoring program, the permit shall specify when the corrective action will begin and such a requirement will operate in lieu of Subsection R315-264-99(i)(2).

(d) In conjunction with a corrective action program, the owner or operator shall establish and implement a ground-water monitoring program to demonstrate the effectiveness of the

corrective action program. Such a monitoring program may be based on the requirements for a compliance monitoring program under Section R315-264-99 and shall be as effective as that program in determining compliance with the ground-water protection standard under Section R315-264-92 and in determining the success of a corrective action program under Subsection R315-264-100(e), where appropriate.

(e) In addition to the other requirements of Section R315-264-100, the owner or operator shall conduct a corrective action program to remove or treat in place any hazardous constituents under Section R315-264-93 that exceed concentration limits under Section R315-264-94 in groundwater:

(1) Between the compliance point under Section R315-264-95 and the downgradient property boundary; and

(2) Beyond the facility boundary, where necessary to protect human health and the environment, unless the owner or operator demonstrates to the satisfaction of the Director that, despite the owner's or operator's best efforts, the owner or operator was unable to obtain the necessary permission to undertake such action. The owner/operator is not relieved of all responsibility to clean up a release that has migrated beyond the facility boundary where off-site access is denied. On-site measures to address such releases will be determined on a case-by-case basis.

(3) Corrective action measures under Subsection R315-264-100(e) shall be initiated and completed within a reasonable period of time considering the extent of contamination.

(4) Corrective action measures under Subsection R315-264-100(e) may be terminated once the concentration of hazardous constituents under Section R315-264-93 is reduced to levels below their respective concentration limits under Section R315-264-94.

(f) The owner or operator shall continue corrective action measures during the compliance period to the extent necessary to ensure that the ground-water protection standard is not exceeded. If the owner or operator is conducting corrective action at the end of the compliance period, he shall continue that corrective action for as long as necessary to achieve compliance with the ground-water protection standard. The owner or operator may terminate corrective action measures taken beyond the period equal to the active life of the waste management area, including the closure period, if he can demonstrate, based on data from the ground-water monitoring program under Subsection R315-264-100(d), that the ground-water protection standard of Section R315-264-92 has not been exceeded for a period of three consecutive years.

(g) The owner or operator shall report in writing to the Director on the effectiveness of the corrective action program. The owner or operator shall submit these reports annually.

(h) If the owner or operator determines that the corrective action program no longer satisfies the requirements Section R315-264-100, he shall, within 90 days, submit an application for a permit modification to make any appropriate changes to the program.

R315-264-101. Corrective Action for Solid Waste Management Units.

(a) The owner or operator of a facility seeking a permit for the treatment, storage or disposal of hazardous waste shall institute corrective action as necessary to protect human health and the environment for all releases of hazardous waste or constituents from any solid waste management unit at the facility, regardless of the time at which waste was placed in such unit.

(b) Corrective action shall be specified in the permit in accordance with Section R315-264-101 and Sections R315-264-550 through 555. The permit shall contain schedules of compliance for such corrective action, where such corrective action cannot be completed prior to issuance of the permit, and

assurances of financial responsibility for completing such corrective action.

(c) The owner or operator shall implement corrective actions beyond the facility property boundary, where necessary to protect human health and the environment, unless the owner or operator demonstrates to the satisfaction of the Director that, despite the owner's or operator's best efforts, the owner or operator was unable to obtain the necessary permission to undertake such actions. The owner/operator is not relieved of all responsibility to clean up a release that has migrated beyond the facility boundary where off-site access is denied. On-site measures to address such releases shall be determined on a case-by-case basis. Assurances of financial responsibility for such corrective action shall be provided.

(d) Section R315-264-101 does not apply to remediation waste management sites unless they are part of a facility subject to a permit for treating, storing or disposing of hazardous wastes that are not remediation wastes.

R315-264-110. Closure and Post-Closure -- Applicability.

Except as Section R315-264-1 provides otherwise:

(a) Sections R315-264-111 through 115, which concern closure, apply to the owners and operators of all hazardous waste management facilities; and

(b) Sections R315-264-116 through 120, which concern post-closure care, apply to the owners and operators of:

(1) All hazardous waste disposal facilities;

(2) Waste piles and surface impoundments from which the owner or operator intends to remove the wastes at closure to the extent that these sections are made applicable to such facilities in Sections R315-264-228 or 258;

(3) Tank systems that are required under Section R315-264-197 to meet the requirements for landfills; and

(4) Containment buildings that are required under Section R315-264-1102 to meet the requirement for landfills.

(c) The Director may replace all or part of the requirements of Sections R315-264-110 through 120, including the unit-specific standards referenced in Subsection R315-264-111(c) applying to a regulated unit, with alternative requirements set out in a permit or in an enforceable document, as defined in Subsection R315-270-1(c)(7), where the Director determines that:

(1) The regulated unit is situated among solid waste management units, or areas of concern, a release has occurred, and both the regulated unit and one or more solid waste management unit(s), or areas of concern, are likely to have contributed to the release; and

(2) It is not necessary to apply the closure requirements of Sections R315-264-110 through 120, and those referenced herein, because the alternative requirements will protect human health and the environment and will satisfy the closure performance standard of Subsections R315-264-111(a) and (b).

R315-264-111. Closure Performance Standard.

The owner or operator shall close the facility in a manner that:

(a) Minimizes the need for further maintenance; and

(b) Controls, minimizes or eliminates, to the extent necessary to protect human health and the environment, post-closure escape of hazardous waste, hazardous constituents, leachate, contaminated run-off, or hazardous waste decomposition products to the ground or surface waters or to the atmosphere; and

(c) Complies with the closure requirements of Rule R315-264, including, but not limited to, the requirements of Sections R315-264-178, 197, 228, 258, 280, 310, 351, 601 through 603, and 1102.

R315-264-112. Closure plan; Amendment of Plan.

(a) Written plan.

(1) The owner or operator of a hazardous waste management facility shall have a written closure plan. In addition, certain surface impoundments and waste piles from which the owner or operator intends to remove or decontaminate the hazardous waste at partial or final closure are required by Subsections R315-264-228(c)(1)(i) and 258(c)(1)(i) to have contingent closure plans. The plan shall be submitted with the permit application, in accordance with Subsection R315-270-14(b)(13), and approved by the Director as part of the permit issuance procedures under Rule R315-124. In accordance with Section R315-270-32, the approved closure plan shall become a condition of any permit.

(2) Plans shall be consistent with Sections R315-264-111 through 115 and the applicable requirements of Sections R315-264-90 through 101, Sections R315-264-178, 197, 228, 258, 280, 310, 351, 601, and 1102. Until final closure is completed and certified in accordance with Section R315-264-115, a copy of the approved plan and all approved revisions shall be furnished to the Director upon request, including requests by mail.

(b) Content of plan. The plan shall identify steps necessary to perform partial and/or final closure of the facility at any point during its active life. The closure plan shall include, at least:

(1) A description of how each hazardous waste management unit at the facility will be closed in accordance with Section R315-264-111;

(2) A description of how final closure of the facility will be conducted in accordance with Section R315-264-111. The description shall identify the maximum extent of the operations which will be unclosed during the active life of the facility; and

(3) An estimate of the maximum inventory of hazardous wastes ever on-site over the active life of the facility and a detailed description of the methods to be used during partial closures and final closure, including, but not limited to, methods for removing, transporting, treating, storing, or disposing of all hazardous wastes, and identification of the type(s) of the off-site hazardous waste management units to be used, if applicable; and

(4) A detailed description of the steps needed to remove or decontaminate all hazardous waste residues and contaminated containment system components, equipment, structures, and soils during partial and final closure, including, but not limited to, procedures for cleaning equipment and removing contaminated soils, methods for sampling and testing surrounding soils, and criteria for determining the extent of decontamination required to satisfy the closure performance standard; and

(5) A detailed description of other activities necessary during the closure period to ensure that all partial closures and final closure satisfy the closure performance standards, including, but not limited to, ground-water monitoring, leachate collection, and run-on and run-off control; and

(6) A schedule for closure of each hazardous waste management unit and for final closure of the facility. The schedule shall include, at a minimum, the total time required to close each hazardous waste management unit and the time required for intervening closure activities which will allow tracking of the progress of partial and final closure. For example, in the case of a landfill unit, estimates of the time required to treat or dispose of all hazardous waste inventory and of the time required to place a final cover shall be included.

(7) For facilities that use trust funds to establish financial assurance under Section R315-264-143 or Section R315-264-145 and that are expected to close prior to the expiration of the permit, an estimate of the expected year of final closure.

(8) For facilities where the Director has applied alternative requirements at a regulated unit under Subsections R315-264-90(f), 264-110(c), and/or Subsection R315-264-140(d), either

the alternative requirements applying to the regulated unit, or a reference to the enforceable document containing those alternative requirements.

(c) Amendment of plan. The owner or operator shall submit a written notification of or request for a permit modification to authorize a change in operating plans, facility design, or the approved closure plan in accordance with the applicable procedures in Rules R315-124 and 270. The written notification or request shall include a copy of the amended closure plan for review or approval by the Director.

(1) The owner or operator may submit a written notification or request to the Director for a permit modification to amend the closure plan at any time prior to the notification of partial or final closure of the facility.

(2) The owner or operator shall submit a written notification of or request for a permit modification to authorize a change in the approved closure plan whenever:

(i) Changes in operating plans or facility design affect the closure plan, or

(ii) There is a change in the expected year of closure, if applicable, or

(iii) In conducting partial or final closure activities, unexpected events require a modification of the approved closure plan.

(iv) The owner or operator requests the Director to apply alternative requirements to a regulated unit under Subsections R315-264-90(f), 264-110(c), and/or Subsection R315-264-140(d).

(3) The owner or operator shall submit a written request for a permit modification including a copy of the amended closure plan for approval at least 60 days prior to the proposed change in facility design or operation, or no later than 60 days after an unexpected event has occurred which has affected the closure plan. If an unexpected event occurs during the partial or final closure period, the owner or operator shall request a permit modification no later than 30 days after the unexpected event. An owner or operator of a surface impoundment or waste pile that intends to remove all hazardous waste at closure and is not otherwise required to prepare a contingency closure plan under Subsection R315-264-228(c)(1)(i) or Subsection R315-264-258(c)(1)(i), shall submit an amended closure plan to the Director no later than 60 days from the date that the owner or operator or Director determines that the hazardous waste management unit shall be closed as a landfill, subject to the requirements of Section R315-264-310, or no later than 30 days from that date if the determination is made during partial or final closure. The Director shall approve, disapprove, or modify this amended plan in accordance with the procedures in Rules R315-124 and 270. In accordance with Section R315-270-32, the approved closure plan shall become a condition of any permit issued.

(4) The Director may request modifications to the plan under the conditions described in Subsection R315-264-112(c)(2). The owner or operator shall submit the modified plan within 60 days of the Director's request, or within 30 days if the change in facility conditions occurs during partial or final closure. Any modifications requested by the Director shall be approved in accordance with the procedures in Rules R315-124 and 270.

(d) Notification of partial closure and final closure.

(1) The owner or operator shall notify the Director in writing at least 60 days prior to the date on which he expects to begin closure of a surface impoundment, waste pile, land treatment or landfill unit, or final closure of a facility with such a unit. The owner or operator shall notify the Director in writing at least 45 days prior to the date on which he expects to begin final closure of a facility with only treatment or storage tanks, container storage, or incinerator units to be closed. The owner or operator shall notify the Director in writing at least 45

days prior to the date on which he expects to begin partial or final closure of a boiler or industrial furnace, whichever is earlier.

(2) The date when he "expects to begin closure" shall be either:

(i) No later than 30 days after the date on which any hazardous waste management unit receives the known final volume of hazardous wastes, or if there is a reasonable possibility that the hazardous waste management unit will receive additional hazardous wastes, no later than one year after the date on which the unit received the most recent volume of hazardous wastes. If the owner or operator of a hazardous waste management unit can demonstrate to the Director that the hazardous waste management unit or facility has the capacity to receive additional hazardous wastes and he has taken all steps to prevent threats to human health and the environment, including compliance with all applicable permit requirements, the Director may approve an extension to this one-year limit; or

(ii) For units meeting the requirements of Subsection R315-264-113(d), no later than 30 days after the date on which the hazardous waste management unit receives the known final volume of non-hazardous wastes, or if there is a reasonable possibility that the hazardous waste management unit will receive additional non-hazardous wastes, no later than one year after the date on which the unit received the most recent volume of non-hazardous wastes. If the owner or operator can demonstrate to the Director that the hazardous waste management unit has the capacity to receive additional non-hazardous wastes and he has taken, and will continue to take, all steps to prevent threats to human health and the environment, including compliance with all applicable permit requirements, the Director may approve an extension to this one-year limit.

(3) If the facility's permit is terminated, or if the facility is otherwise ordered, by judicial decree or final administrative order, to cease receiving hazardous wastes or to close, then the requirements of Subsection R315-264-112(d) do not apply. However, the owner or operator shall close the facility in accordance with the deadlines established in Section R315-264-113.

(e) Removal of wastes and decontamination or dismantling of equipment. Nothing in Section R315-264-112 shall preclude the owner or operator from removing hazardous wastes and decontaminating or dismantling equipment in accordance with the approved partial or final closure plan at any time before or after notification of partial or final closure.

R315-264-113. Closure; Time Allowed for Closure.

(a) Within 90 days after receiving the final volume of hazardous wastes, or the final volume of non-hazardous wastes if the owner or operator complies with all applicable requirements in Subsections R315-264-113(d) and (e), at a hazardous waste management unit or facility, the owner or operator shall treat, remove from the unit or facility, or dispose of on-site, all hazardous wastes in accordance with the approved closure plan. The Director may approve a longer period if the owner or operator complies with all applicable requirements for requesting a modification to the permit and demonstrates that:

(1)(i) The activities required to comply with R315-264-113 will, of necessity, take longer than 90 days to complete; or

(ii)(A) The hazardous waste management unit or facility has the capacity to receive additional hazardous wastes, or has the capacity to receive non-hazardous wastes if the owner or operator complies with Subsections R315-264-113(d) and (e); and

(B) There is a reasonable likelihood that he or another person will recommence operation of the hazardous waste management unit or the facility within one year; and

(C) Closure of the hazardous waste management unit or facility would be incompatible with continued operation of the

site; and

(2) He has taken and will continue to take all steps to prevent threats to human health and the environment, including compliance with all applicable permit requirements.

(b) The owner or operator shall complete partial and final closure activities in accordance with the approved closure plan and within 180 days after receiving the final volume of hazardous wastes, or the final volume of non-hazardous wastes if the owner or operator complies with all applicable requirements in Subsections R315-264-113(d) and (e), at the hazardous waste management unit or facility. The Director may approve an extension to the closure period if the owner or operator complies with all applicable requirements for requesting a modification to the permit and demonstrates that:

(1)(i) The partial or final closure activities will, of necessity, take longer than 180 days to complete; or

(ii)(A) The hazardous waste management unit or facility has the capacity to receive additional hazardous wastes, or has the capacity to receive non-hazardous wastes if the owner or operator complies with Subsections R315-264-113(d) and (e); and

(B) There is reasonable likelihood that he or another person will recommence operation of the hazardous waste management unit or the facility within one year; and

(C) Closure of the hazardous waste management unit or facility would be incompatible with continued operation of the site; and

(2) He has taken and will continue to take all steps to prevent threats to human health and the environment from the unclosed but not operating hazardous waste management unit or facility, including compliance with all applicable permit requirements.

(c) The demonstrations referred to in Subsections R315-264-113(a)(1) and (b)(1) shall be made as follows:

(1) The demonstrations in Subsection R315-264-113(a)(1) shall be made at least 30 days prior to the expiration of the 90-day period in Subsection R315-264-113(a); and

(2) The demonstration in Subsection R315-264-113(b)(1) shall be made at least 30 days prior to the expiration of the 180-day period in Subsection R315-264-113(b), unless the owner or operator is otherwise subject to the deadlines in Subsection R315-264-113(d).

(d) The Director may allow an owner or operator to receive only non-hazardous wastes in a landfill, land treatment, or surface impoundment unit after the final receipt of hazardous wastes at that unit if:

(1) The owner or operator requests a permit modification in compliance with all applicable requirements in Rules R315-270 and 124 and in the permit modification request demonstrates that:

(i) The unit has the existing design capacity as indicated on the part A application to receive non-hazardous wastes; and

(ii) There is a reasonable likelihood that the owner or operator or another person will receive non-hazardous wastes in the unit within one year after the final receipt of hazardous wastes; and

(iii) The non-hazardous wastes will not be incompatible with any remaining wastes in the unit, or with the facility design and operating requirements of the unit or facility under Rule R315-264; and

(iv) Closure of the hazardous waste management unit would be incompatible with continued operation of the unit or facility; and

(v) The owner or operator is operating and will continue to operate in compliance with all applicable permit requirements; and

(2) The request to modify the permit includes an amended waste analysis plan, ground-water monitoring and response program, human exposure assessment required under RCRA

section 3019, and closure and post-closure plans, and updated cost estimates and demonstrations of financial assurance for closure and post-closure care as necessary and appropriate, to reflect any changes due to the presence of hazardous constituents in the non-hazardous wastes, and changes in closure activities, including the expected year of closure if applicable under Subsection R315-264-112(b)(7), as a result of the receipt of non-hazardous wastes following the final receipt of hazardous wastes; and

(3) The request to modify the permit includes revisions, as necessary and appropriate, to affected conditions of the permit to account for the receipt of non-hazardous wastes following receipt of the final volume of hazardous wastes; and

(4) The request to modify the permit and the demonstrations referred to in Subsections R315-264-113(d)(1) and (d)(2) are submitted to the Director no later than 120 days prior to the date on which the owner or operator of the facility receives the known final volume of hazardous wastes at the unit, or no later than 90 days after the effective date of this rule in the state in which the unit is located, whichever is later.

(e) In addition to the requirements in Subsection R315-264-113(d), an owner or operator of a hazardous waste surface impoundment that is not in compliance with the liner and leachate collection system requirements in Subsection R315-264-221(c) or (d) shall:

(1) Submit with the request to modify the permit:

(i) A contingent corrective measures plan, unless a corrective action plan has already been submitted under Section R315-264-99; and

(ii) A plan for removing hazardous wastes in compliance with Subsection R315-264-113(e)(2); and

(2) Remove all hazardous wastes from the unit by removing all hazardous liquids, and removing all hazardous sludges to the extent practicable without impairing the integrity of the liner(s), if any.

(3) Removal of hazardous wastes shall be completed no later than 90 days after the final receipt of hazardous wastes. The Director may approve an extension to this deadline if the owner or operator demonstrates that the removal of hazardous wastes will, of necessity, take longer than the allotted period to complete and that an extension will not pose a threat to human health and the environment.

(4) If a release that is a statistically significant increase, or decrease in the case of pH, over background values for detection monitoring parameters or constituents specified in the permit or that exceeds the facility's ground-water protection standard at the point of compliance, if applicable, is detected in accordance with the requirements in Sections R315-264-90 through 101, the owner or operator of the unit:

(i) Shall implement corrective measures in accordance with the approved contingent corrective measures plan required by Subsection R315-264-113(e)(1) no later than one year after detection of the release, or approval of the contingent corrective measures plan, whichever is later;

(ii) May continue to receive wastes at the unit following detection of the release only if the approved corrective measures plan includes a demonstration that continued receipt of wastes will not impede corrective action; and

(iii) May be required by the Director to implement corrective measures in less than one year or to cease the receipt of wastes until corrective measures have been implemented if necessary to protect human health and the environment.

(5) During the period of corrective action, the owner or operator shall provide annual reports to the Director describing the progress of the corrective action program, compile all ground-water monitoring data, and evaluate the effect of the continued receipt of non-hazardous wastes on the effectiveness of the corrective action.

(6) The Director may require the owner or operator to

commence closure of the unit if the owner or operator fails to implement corrective action measures in accordance with the approved contingent corrective measures plan within one year as required in Subsection R315-264-113(e)(4), or fails to make substantial progress in implementing corrective action and achieving the facility's ground-water protection standard or background levels if the facility has not yet established a ground-water protection standard.

(7) If the owner or operator fails to implement corrective measures as required in Subsection R315-264-113(e)(4), or if the Director determines that substantial progress has not been made pursuant to Subsection R315-264-113(e)(6) he shall:

(i) Notify the owner or operator in writing that the owner or operator shall begin closure in accordance with the deadlines in Subsections R315-264-113(a) and (b) and provide a detailed statement of reasons for this determination, and

(ii) Provide the owner or operator and the public, through a newspaper notice, the opportunity to submit written comments on the decision no later than 20 days after the date of the notice.

(iii) If the Director receives no written comments, the decision shall become final five days after the close of the comment period. The Director shall notify the owner or operator that the decision is final, and that a revised closure plan, if necessary, shall be submitted within 15 days of the final notice and that closure shall begin in accordance with the deadlines in Subsections R315-264-113 (a) and (b).

(iv) If the Director receives written comments on the decision, he shall make a final decision within 30 days after the end of the comment period, and provide the owner or operator in writing and the public through a newspaper notice, a detailed statement of reasons for the final decision. If the Director determines that substantial progress has not been made, closure shall be initiated in accordance with the deadlines in Subsections R315-264-113(a) and (b).

(v) The final determinations made by the Director under Subsections R315-264-113(e)(7)(iii) and (iv) are not subject to administrative appeal.

R315-264-114. Disposal or Decontamination of Equipment, Structures and Soils.

During the partial and final closure periods, all contaminated equipment, structures and soils shall be properly disposed of or decontaminated unless otherwise specified in Sections R315-264-197, 228, 258, 280 or 310. By removing any hazardous wastes or hazardous constituents during partial and final closure, the owner or operator may become a generator of hazardous waste and shall handle that waste in accordance with all applicable requirements of Rule R315-262.

R315-264-115. Certification of Closure.

Within 60 days of completion of closure of each hazardous waste surface impoundment, waste pile, land treatment, and landfill unit, and within 60 days of the completion of final closure, the owner or operator shall submit to the Director, by registered mail, a certification that the hazardous waste management unit or facility, as applicable, has been closed in accordance with the specifications in the approved closure plan. The certification shall be signed by the owner or operator and by a qualified Professional Engineer. Documentation supporting the Professional Engineer's certification shall be furnished to the Director upon request until he releases the owner or operator from the financial assurance requirements for closure under Subsection R315-264-143(i).

R315-264-116. Survey Plat.

No later than the submission of the certification of closure of each hazardous waste disposal unit, the owner or operator shall submit to the local zoning authority, or the authority with jurisdiction over local land use, and to the Director, a survey

plat indicating the location and dimensions of landfill cells or other hazardous waste disposal units with respect to permanently surveyed benchmarks. This plat shall be prepared and certified by a professional land surveyor. The plat filed with the local zoning authority, or the authority with jurisdiction over local land use, shall contain a note, prominently displayed, which states the owner's or operator's obligation to restrict disturbance of the hazardous waste disposal unit in accordance with the applicable Sections of R315-264-110 through 120.

R315-264-117. Post-Closure Care and Use of Property.

(a)(1) Post-closure care for each hazardous waste management unit subject to the requirements of Sections R315-264-117 through 120 shall begin after completion of closure of the unit and continue for 30 years after that date and shall consist of at least the following:

(i) Monitoring and reporting in accordance with the requirements of Sections R315-264-90 through 101, 220 through 232, 250 through 254, 256 through 259, 270 through 283, 300 through 317, and 600 through 603; and

(ii) Maintenance and monitoring of waste containment systems in accordance with the requirements of Sections R315-264-90 through 101, 220 through 232, 250 through 254, 256 through 259, 270 through 283, 300 through 317, and 600 through 603.

(2) Any time preceding partial closure of a hazardous waste management unit subject to post-closure care requirements or final closure, or any time during the post-closure period for a particular unit, the Director may, in accordance with the permit modification procedures in Rules R315-124 and 270:

(i) Shorten the post-closure care period applicable to the hazardous waste management unit, or facility, if all disposal units have been closed, if he finds that the reduced period is sufficient to protect human health and the environment, e.g., leachate or ground-water monitoring results, characteristics of the hazardous wastes, application of advanced technology, or alternative disposal, treatment, or re-use techniques indicate that the hazardous waste management unit or facility is secure; or

(ii) Extend the post-closure care period applicable to the hazardous waste management unit or facility if he finds that the extended period is necessary to protect human health and the environment, e.g., leachate or ground-water monitoring results indicate a potential for migration of hazardous wastes at levels which may be harmful to human health and the environment.

(b) The Director may require, at partial and final closure, continuation of any of the security requirements of Section R315-264-14 during part or all of the post-closure period when:

(1) Hazardous wastes may remain exposed after completion of partial or final closure; or

(2) Access by the public or domestic livestock may pose a hazard to human health.

(c) Post-closure use of property on or in which hazardous wastes remain after partial or final closure shall never be allowed to disturb the integrity of the final cover, liner(s), or any other components of the containment system, or the function of the facility's monitoring systems, unless the Director finds that the disturbance:

(1) Is necessary to the proposed use of the property, and will not increase the potential hazard to human health or the environment; or

(2) Is necessary to reduce a threat to human health or the environment.

(d) All post-closure care activities shall be in accordance with the provisions of the approved post-closure plan as specified in Section R315-264-118.

R315-264-118. Post-Closure Plan; Amendment of Plan.

(a) Written Plan. The owner or operator of a hazardous

waste disposal unit shall have a written post-closure plan. In addition, certain surface impoundments and waste piles from which the owner or operator intends to remove or decontaminate the hazardous wastes at partial or final closure are required by Subsections R315-264-228(c)(1)(ii) and 264-258(c)(1)(ii) to have contingent post-closure plans. Owners or operators of surface impoundments and waste piles not otherwise required to prepare contingent post-closure plans under Subsections R315-264-228(c)(1)(ii) and 264-258(c)(1)(ii) shall submit a post-closure plan to the Director within 90 days from the date that the owner or operator or Director determines that the hazardous waste management unit shall be closed as a landfill, subject to the requirements of Sections R315-264-117 through 120. The plan shall be submitted with the permit application, in accordance with Subsection R315-270-14(b)(13), and approved by the Director as part of the permit issuance procedures under Rule R315-124. In accordance with Section R315-270-32, the approved post-closure plan shall become a condition of any RCRA permit issued.

(b) For each hazardous waste management unit subject to the requirements Section R315-264-118, the post-closure plan shall identify the activities that will be carried on after closure of each disposal unit and the frequency of these activities, and include at least:

(1) A description of the planned monitoring activities and frequencies at which they will be performed to comply with Sections R315-264-90 through 101, 220 through 232, 250 through 259, 270 through 283, 300 through 317, and 600 through 603 during the post-closure care period; and

(2) A description of the planned maintenance activities, and frequencies at which they will be performed, to ensure:

(i) The integrity of the cap and final cover or other containment systems in accordance with the requirements of Sections R315-264-90 through 101, 220 through 232, 250 through 259, 270 through 283, 300 through 317, and 600 through 603; and

(ii) The function of the monitoring equipment in accordance with the requirements of Sections R315-264-90 through 101, 220 through 232, 250 through 259, 270 through 283, 300 through 317, and 600 through 603; and

(3) The name, address, and phone number of the person or office to contact about the hazardous waste disposal unit or facility during the post-closure care period.

(4) For facilities where the Director has applied alternative requirements at a regulated unit under Subsections R315-264-90(f), 264-110(c), and/or 264-140(d), either the alternative requirements that apply to the regulated unit, or a reference to the enforceable document containing those requirements.

(c) Until final closure of the facility, a copy of the approved post-closure plan shall be furnished to the Director upon request, including request by mail. After final closure has been certified, the person or office specified in Subsection R315-264-118(b)(3) shall keep the approved post-closure plan during the remainder of the post-closure period.

(d) Amendment of plan. The owner or operator shall submit a written notification of or request for a permit modification to authorize a change in the approved post-closure plan in accordance with the applicable requirements in Rules R315-124 and 270. The written notification or request shall include a copy of the amended post-closure plan for review or approval by the Director.

(1) The owner or operator may submit a written notification or request to the Director for a permit modification to amend the post-closure plan at any time during the active life of the facility or during the post-closure care period.

(2) The owner or operator shall submit a written notification of or request for a permit modification to authorize a change in the approved post-closure plan whenever:

(i) Changes in operating plans or facility design affect the

approved post-closure plan, or

(ii) There is a change in the expected year of final closure, if applicable, or

(iii) Events which occur during the active life of the facility, including partial and final closures, affect the approved post-closure plan.

(iv) The owner or operator requests the Director to apply alternative requirements to a regulated unit under Subsections R315-264-90(f), 264-110(c), and/or 264-140(d).

(3) The owner or operator shall submit a written request for a permit modification at least 60 days prior to the proposed change in facility design or operation, or no later than 60 days after an unexpected event has occurred which has affected the post-closure plan. An owner or operator of a surface impoundment or waste pile that intends to remove all hazardous waste at closure and is not otherwise required to submit a contingent post-closure plan under Subsections R315-264-228(c)(1)(ii) shall submit a post-closure plan to the Director no later than 90 days after the date that the owner or operator or Director determines that the hazardous waste management unit shall be closed as a landfill, subject to the requirements of Section R315-264-310. The Director shall approve, disapprove or modify this plan in accordance with the procedures in Rules R315-124 and 270. In accordance with Section R315-270-32, the approved post-closure plan shall become a permit condition.

(4) The Director may request modifications to the plan under the conditions described in Subsection R315-264-118(d)(2). The owner or operator shall submit the modified plan no later than 60 days after the Director's request, or no later than 90 days if the unit is a surface impoundment or waste pile not previously required to prepare a contingent post-closure plan. Any modifications requested by the Director shall be approved, disapproved, or modified in accordance with the procedures in Rules R315-124 and 270.

R315-264-119. Post-Closure Notices.

(a) No later than 60 days after certification of closure of each hazardous waste disposal unit, the owner or operator shall submit to the local zoning authority, or the authority with jurisdiction over local land use, and to the Director a record of the type, location, and quantity of hazardous wastes disposed of within each cell or other disposal unit of the facility. For hazardous wastes disposed of before January 12, 1981, the owner or operator shall identify the type, location, and quantity of the hazardous wastes to the best of his knowledge and in accordance with any records he has kept.

(b) Within 60 days of certification of closure of the first hazardous waste disposal unit and within 60 days of certification of closure of the last hazardous waste disposal unit, the owner or operator shall:

(1) Record, in accordance with State law, a notation on the deed to the facility property-or on some other instrument which is normally examined during title search-that will in perpetuity notify any potential purchaser of the property that:

(i) The land has been used to manage hazardous wastes; and

(ii) Its use is restricted under Sections R315-264-110 through 120; and

(iii) The survey plat and record of the type, location, and quantity of hazardous wastes disposed of within each cell or other hazardous waste disposal unit of the facility required by Section R315-264-116 and Subsection R315-264-119(a) have been filed with the local zoning authority or the authority with jurisdiction over local land use and with the Director; and

(2) Submit a certification, signed by the owner or operator, that he has recorded the notation specified in Subsection R315-264-119(b)(1), including a copy of the document in which the notation has been placed, to the Director.

(c) If the owner or operator or any subsequent owner or operator of the land upon which a hazardous waste disposal unit is located wishes to remove hazardous wastes and hazardous waste residues, the liner, if any, or contaminated soils, he shall request a modification to the post-closure permit in accordance with the applicable requirements in Rules R315-124 and 270. The owner or operator shall demonstrate that the removal of hazardous wastes will satisfy the criteria of Subsection R315-264-117(c). By removing hazardous waste, the owner or operator may become a generator of hazardous waste and shall manage it in accordance with all applicable requirements of Rules R315-260 through 266, 268, 270, and 273. If he is granted a permit modification or otherwise granted approval to conduct such removal activities, the owner or operator may request that the Director approve either:

- (1) The removal of the notation on the deed to the facility property or other instrument normally examined during title search; or
- (2) The addition of a notation to the deed or instrument indicating the removal of the hazardous waste.

R315-264-120. Certification of Completion of Post-Closure Care.

No later than 60 days after completion of the established post-closure care period for each hazardous waste disposal unit, the owner or operator shall submit to the Director, by registered mail, a certification that the post-closure care period for the hazardous waste disposal unit was performed in accordance with the specifications in the approved post-closure plan. The certification shall be signed by the owner or operator and a qualified Professional Engineer. Documentation supporting the Professional Engineer's certification shall be furnished to the Director upon request until he releases the owner or operator from the financial assurance requirements for post-closure care under Subsection R315-264-145(i).

R315-264-140. Financial Requirements -- Applicability.

(a) The requirements of Sections R315-264-142, 143, 147 through 151 apply to owners and operators of all hazardous waste facilities, except as provided otherwise in Section R315-264-140 or in Section R315-264-1.

(b) The requirements of Sections R315-264-144 and 145 apply only to owners and operators of:

- (1) Disposal facilities;
- (2) Piles, and surface impoundments from which the owner or operator intends to remove the wastes at closure, to the extent that these sections are made applicable to such facilities in Sections R315-264-228 and 258;
- (3) Tank systems that are required under Section R315-264-197 to meet the requirements for landfills; and
- (4) Containment buildings that are required under Section R315-264-1102 to meet the requirements for landfills.

(c) States and the Federal government are exempt from the requirements of Sections R315-264-140 through 151.

(d) The Director may replace all or part of the requirements of Sections R315-264-140 through 151 applying to a regulated unit with alternative requirements for financial assurance set out in the permit or in an enforceable document, as defined in Subsection R315-270-1(c)(7), where the Director:

- (1) Prescribes alternative requirements for the regulated unit under Subsection R315-264-90(f) and/or Subsection R315-264-110(c); and
- (2) Determines that it is not necessary to apply the requirements of Sections R315-264-140 through 151 because the alternative financial assurance requirements will protect human health and the environment.

R315-264-141. Definitions of Terms as Used in Sections R315-264-140 through 151.

(a) Closure plan means the plan for closure prepared in accordance with the requirements of Section R315-264-112.

(b) Current closure cost estimate means the most recent of the estimates prepared in accordance with Subsections R315-264-142(a), (b), and (c).

(c) Current post-closure cost estimate means the most recent of the estimates prepared in accordance with Subsection R315-264-144(a), (b), and (c).

(d) Parent corporation means a corporation which directly owns at least 50 percent of the voting stock of the corporation which is the facility owner or operator; the latter corporation is deemed a "subsidiary" of the parent corporation.

(e) Post-closure plan means the plan for post-closure care prepared in accordance with the requirements of Sections R315-264-117 through 120.

(f) The following terms are used in the specifications for the financial tests for closure, post-closure care, and liability coverage. The definitions are intended to assist in the understanding of these regulations and are not intended to limit the meanings of terms in a way that conflicts with generally accepted accounting practices.

Assets means all existing and all probable future economic benefits obtained or controlled by a particular entity.

Current assets means cash or other assets or resources commonly identified as those which are reasonably expected to be realized in cash or sold or consumed during the normal operating cycle of the business.

Current liabilities means obligations whose liquidation is reasonably expected to require the use of existing resources properly classifiable as current assets or the creation of other current liabilities.

Current plugging and abandonment cost estimate means the most recent of the estimates prepared in accordance with 40 CFR 144.62(a), (b), and (c).

Independently audited refers to an audit performed by an independent certified public accountant in accordance with generally accepted auditing standards.

Liabilities means probable future sacrifices of economic benefits arising from present obligations to transfer assets or provide services to other entities in the future as a result of past transactions or events.

Net working capital means current assets minus current liabilities.

Net worth means total assets minus total liabilities and is equivalent to owner's equity.

Tangible net worth means the tangible assets that remain after deducting liabilities; such assets would not include intangibles such as goodwill and rights to patents or royalties.

(g) In the liability insurance requirements the terms bodily injury and property damage shall have the meanings given these terms by applicable State law. However, these terms do not include those liabilities which, consistent with standard industry practices, are excluded from coverage in liability policies for bodily injury and property damage. The Director intends the meanings of other terms used in the liability insurance requirements to be consistent with their common meanings within the insurance industry. The definitions given below of several of the terms are intended to assist in the understanding of these regulations and are not intended to limit their meanings in a way that conflicts with general insurance industry usage.

Accidental occurrence means an accident, including continuous or repeated exposure to conditions, which results in bodily injury or property damage neither expected nor intended from the standpoint of the insured.

Legal defense costs means any expenses that an insurer incurs in defending against claims of third parties brought under the terms and conditions of an insurance policy.

Nonsudden accidental occurrence means an occurrence which takes place over time and involves continuous or repeated

exposure.

Sudden accidental occurrence means an occurrence which is not continuous or repeated in nature.

(h) Substantial business relationship means the extent of a business relationship necessary under applicable State law to make a guarantee contract issued incident to that relationship valid and enforceable. A "substantial business relationship" shall arise from a pattern of recent or ongoing business transactions, in addition to the guarantee itself, such that a currently existing business relationship between the guarantor and the owner or operator is demonstrated to the satisfaction of the Director.

R315-264-142. Cost Estimate for Closure.

(a) The owner or operator shall have a detailed written estimate, in current dollars, of the cost of closing the facility in accordance with the requirements in Sections R315-264-111 through 115 and applicable closure requirements in Sections R315-264-178, 197, 228, 258, 280, 310, 351, 601 through 603, and 1102.

(1) The estimate shall equal the cost of final closure at the point in the facility's active life when the extent and manner of its operation would make closure the most expensive, as indicated by its closure plan, see Subsection R315-264-112(b); and

(2) The closure cost estimate shall be based on the costs to the owner or operator of hiring a third party to close the facility. A third party is a party who is neither a parent nor a subsidiary of the owner or operator. See definition of parent corporation in Subsection R315-264-141(d). The owner or operator may use costs for on-site disposal if he can demonstrate that on-site disposal capacity will exist at all times over the life of the facility.

(3) The closure cost estimate may not incorporate any salvage value that may be realized with the sale of hazardous wastes, or non-hazardous wastes if applicable under Subsection R315-264-113(d), facility structures or equipment, land, or other assets associated with the facility at the time of partial or final closure.

(4) The owner or operator may not incorporate a zero cost for hazardous wastes, or non-hazardous wastes if applicable under Subsection R315-264-113(d), that might have economic value.

(b) During the active life of the facility, the owner or operator shall adjust the closure cost estimate for inflation within 60 days prior to the anniversary date of the establishment of the financial instrument(s) used to comply with Section R315-264-143. For owners and operators using the financial test or corporate guarantee, the closure cost estimate shall be updated for inflation within 30 days after the close of the firm's fiscal year and before submission of updated information to the Director as specified in Subsection R315-264-143(f)(3). The adjustment may be made by recalculating the maximum costs of closure in current dollars, or by using an inflation factor derived from the most recent Implicit Price Deflator for Gross National Product published by the U.S. Department of Commerce in its Survey of Current Business, as specified in Subsections R315-264-142(b)(1) and (2). The inflation factor is the result of dividing the latest published annual Deflator by the Deflator for the previous year.

(1) The first adjustment is made by multiplying the closure cost estimate by the inflation factor. The result is the adjusted closure cost estimate.

(2) Subsequent adjustments are made by multiplying the latest adjusted closure cost estimate by the latest inflation factor.

(c) During the active life of the facility, the owner or operator shall revise the closure cost estimate no later than 30 days after the Director has approved the request to modify the closure plan, if the change in the closure plan increases the cost

of closure. The revised closure cost estimate shall be adjusted for inflation as specified in Subsection R315-264-142(b).

(d) The owner or operator shall keep the following at the facility during the operating life of the facility: The latest closure cost estimate prepared in accordance with Subsection R315-264-142(a) and (c) and, when this estimate has been adjusted in accordance with Subsection R315-264-142(b), the latest adjusted closure cost estimate

R315-264-143. Financial Assurance for Closure.

An owner or operator of each facility shall establish financial assurance for closure of the facility. He shall choose from the options as specified in Subsections R315-264-143(a) through (f).

(a) Closure trust fund.

(1) An owner or operator may satisfy the requirements of Section R315-264-143 by establishing a closure trust fund which conforms to the requirements of Subsection R315-264-143(a) and submitting an originally signed duplicate of the trust agreement to the Director. An owner or operator of a new facility shall submit the originally signed duplicate of the trust agreement to the Director at least 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal. The trustee shall be an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a Federal or State agency.

(2) The wording of the trust agreement shall be identical to the wording specified in Subsection R315-264-151(a)(1), and the trust agreement shall be accompanied by a formal certification of acknowledgment, for example, see Subsection R315-264-151(a)(2). Schedule A of the trust agreement shall be updated within 60 days after a change in the amount of the current closure cost estimate covered by the agreement.

(3) Payments into the trust fund shall be made annually by the owner or operator over the term of the initial RCRA permit or over the remaining operating life of the facility as estimated in the closure plan, whichever period is shorter; this period is hereafter referred to as the "pay-in period." The payments into the closure trust fund shall be made as follows:

(i) For a new facility, the first payment shall be made before the initial receipt of hazardous waste for treatment, storage, or disposal. A receipt from the trustee for this payment shall be submitted by the owner or operator to the Director before this initial receipt of hazardous waste. The first payment shall be at least equal to the current closure cost estimate, except as provided in Subsection R315-264-143(g), divided by the number of years in the pay-in period. Subsequent payments shall be made no later than 30 days after each anniversary date of the first payment. The amount of each subsequent payment shall be determined by this formula:

$$\text{Next Payment} = (\text{CE} - \text{CV}) / \text{Y}$$

where CE is the current closure cost estimate, CV is the current value of the trust fund, and Y is the number of years remaining in the pay-in period.

(ii) If an owner or operator establishes a trust fund as specified in 40 CFR 265.143(a), which is adopted by reference; and the value of that trust fund is less than the current closure cost estimate when a permit is awarded for the facility, the amount of the current closure cost estimate still to be paid into the trust fund shall be paid in over the pay-in period as defined in Subsection R315-264-143(a)(3). Payments shall continue to be made no later than 30 days after each anniversary date of the first payment made pursuant to Rule R315-265. The amount of each payment shall be determined by this formula:

$$\text{Next Payment} = (\text{CE} - \text{CV}) / \text{Y}$$

where CE is the current closure cost estimate, CV is the current value of the trust fund, and Y is the number of years remaining in the pay-in period.

(4) The owner or operator may accelerate payments into

the trust fund or he may deposit the full amount of the current closure cost estimate at the time the fund is established. However, he shall maintain the value of the fund at no less than the value that the fund would have if annual payments were made as specified in Subsection R315-264-143(a)(3).

(5) If the owner or operator establishes a closure trust fund after having used one or more alternate mechanisms specified in Section R315-264-143 or in 40 CFR 265.143, which is adopted by reference, his first payment shall be in at least the amount that the fund would contain if the trust fund were established initially and annual payments made according to specifications of Section R315-264-143 and 40 CFR 265.143(a), which is adopted by reference; as applicable.

(6) After the pay-in period is completed, whenever the current closure cost estimate changes, the owner or operator shall compare the new estimate with the trustee's most recent annual valuation of the trust fund. If the value of the fund is less than the amount of the new estimate, the owner or operator, within 60 days after the change in the cost estimate, shall either deposit an amount into the fund so that its value after this deposit at least equals the amount of the current closure cost estimate, or obtain other financial assurance as specified in Section R315-264-143 to cover the difference.

(7) If the value of the trust fund is greater than the total amount of the current closure cost estimate, the owner or operator may submit a written request to the Director for release of the amount in excess of the current closure cost estimate.

(8) If an owner or operator substitutes other financial assurance as specified in Section R315-264-143 for all or part of the trust fund, he may submit a written request to the Director for release of the amount in excess of the current closure cost estimate covered by the trust fund.

(9) Within 60 days after receiving a request from the owner or operator for release of funds as specified in Subsection R315-264-143(a)(7) or (8), the Director shall instruct the trustee to release to the owner or operator such funds as the Director specifies in writing.

(10) After beginning partial or final closure, an owner or operator or another person authorized to conduct partial or final closure may request reimbursements for partial or final closure expenditures by submitting itemized bills to the Director. The owner or operator may request reimbursements for partial closure only if sufficient funds are remaining in the trust fund to cover the maximum costs of closing the facility over its remaining operating life. Within 60 days after receiving bills for partial or final closure activities, the Director shall instruct the trustee to make reimbursements in those amounts as the Director specifies in writing, if the Director determines that the partial or final closure expenditures are in accordance with the approved closure plan, or otherwise justified. If the Director has reason to believe that the maximum cost of closure over the remaining life of the facility will be significantly greater than the value of the trust fund, he may withhold reimbursements of such amounts as he deems prudent until he determines, in accordance with Subsection R315-264-143(i) that the owner or operator is no longer required to maintain financial assurance for final closure of the facility. If the Director does not instruct the trustee to make such reimbursements, he shall provide the owner or operator with a detailed written statement of reasons.

(11) The Director shall agree to termination of the trust when:

(i) An owner or operator substitutes alternate financial assurance as specified in Section R315-264-143; or

(ii) The Director releases the owner or operator from the requirements of Section R315-264-143 in accordance with Subsection R315-264-143(i).

(b) Surety bond guaranteeing payment into a closure trust fund.

(1) An owner or operator may satisfy the requirements of

Section R315-264-143 by obtaining a surety bond which conforms to the requirements of Subsection R315-264-143(b) and submitting the bond to the Director. An owner or operator of a new facility shall submit the bond to the Director at least 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal. The bond shall be effective before this initial receipt of hazardous waste. The surety company issuing the bond shall, at a minimum, be among those listed as acceptable sureties on Federal bonds in Circular 570 of the U.S. Department of the Treasury.

(2) The wording of the surety bond shall be identical to the wording specified in Subsection R315-264-151(b).

(3) The owner or operator who uses a surety bond to satisfy the requirements Section R315-264-143 shall also establish a standby trust fund. Under the terms of the bond, all payments made thereunder shall be deposited by the surety directly into the standby trust fund in accordance with instructions from the Director. This standby trust fund shall meet the requirements specified in Subsection R315-264-143(a), except that:

(i) An originally signed duplicate of the trust agreement shall be submitted to the Director with the surety bond; and

(ii) Until the standby trust fund is funded pursuant to the requirements of Section R315-264-143, the following are not required by these regulations:

(A) Payments into the trust fund as specified in Subsection R315-264-143(a);

(B) Updating of Schedule A of the trust agreement, see Subsection R315-264-151(a), to show current closure cost estimates;

(C) Annual valuations as required by the trust agreement; and

(D) Notices of nonpayment as required by the trust agreement.

(4) The bond shall guarantee that the owner or operator shall:

(i) Fund the standby trust fund in an amount equal to the penal sum of the bond before the beginning of final closure of the facility; or

(ii) Fund the standby trust fund in an amount equal to the penal sum within 15 days after an administrative order to begin final closure issued by the Director becomes final, or within 15 days after an order to begin final closure is issued by a U.S. district court or other court of competent jurisdiction; or

(iii) Provide alternate financial assurance as specified in Section R315-264-143, and obtain the Director's written approval of the assurance provided, within 90 days after receipt by both the owner or operator and the Director of a notice of cancellation of the bond from the surety.

(5) Under the terms of the bond, the surety shall become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond.

(6) The penal sum of the bond shall be in an amount at least equal to the current closure cost estimate, except as provided in Subsection R315-264-143(g).

(7) Whenever the current closure cost estimate increases to an amount greater than the penal sum, the owner or operator, within 60 days after the increase, shall either cause the penal sum to be increased to an amount at least equal to the current closure cost estimate and submit evidence of such increase to the Director, or obtain other financial assurance as specified in Section R315-264-143 to cover the increase. Whenever the current closure cost estimate decreases, the penal sum may be reduced to the amount of the current closure cost estimate following written approval by the Director.

(8) Under the terms of the bond, the surety may cancel the bond by sending notice of cancellation by certified mail to the owner or operator and to the Director. Cancellation may not occur, however, during the 120 days beginning on the date of

receipt of the notice of cancellation by both the owner or operator and the Director, as evidenced by the return receipts.

(9) The owner or operator may cancel the bond if the Director has given prior written consent based on his receipt of evidence of alternate financial assurance as specified in Section R315-264-143.

(c) Surety bond guaranteeing performance of closure.

(1) An owner or operator may satisfy the requirements of Section R315-264-143 by obtaining a surety bond which conforms to the requirements of Subsection R315-264-143(c) and submitting the bond to the Director. An owner or operator of a new facility shall submit the bond to the Director at least 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal. The bond shall be effective before this initial receipt of hazardous waste. The surety company issuing the bond shall, at a minimum, be among those listed as acceptable sureties on Federal bonds in Circular 570 of the U.S. Department of the Treasury.

(2) The wording of the surety bond shall be identical to the wording specified in Subsection R315-264-151(c).

(3) The owner or operator who uses a surety bond to satisfy the requirements Section R315-264-143 shall also establish a standby trust fund. Under the terms of the bond, all payments made thereunder shall be deposited by the surety directly into the standby trust fund in accordance with instructions from the Director. This standby trust shall meet the requirements specified in Subsection R315-264-143(a), except that:

(i) An originally signed duplicate of the trust agreement shall be submitted to the Director with the surety bond; and

(ii) Unless the standby trust fund is funded pursuant to the requirements of Section R315-264-143, the following are not required by Section R315-264-143:

(A) Payments into the trust fund as specified in Subsection R315-264-143(a);

(B) Updating of Schedule A of the trust agreement, see Subsection R315-264-151(a), to show current closure cost estimates;

(C) Annual valuations as required by the trust agreement; and

(D) Notices of nonpayment as required by the trust agreement.

(4) The bond shall guarantee that the owner or operator shall:

(i) Perform final closure in accordance with the closure plan and other requirements of the permit for the facility whenever required to do so; or

(ii) Provide alternate financial assurance as specified in Section R315-264-143, and obtain the Director's written approval of the assurance provided, within 90 days after receipt by both the owner or operator and the Director of a notice of cancellation of the bond from the surety.

(5) Under the terms of the bond, the surety shall become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond. Following a final administrative determination pursuant to section 3008 of RCRA that the owner or operator has failed to perform final closure in accordance with the approved closure plan and other permit requirements when required to do so, under the terms of the bond the surety shall perform final closure as guaranteed by the bond or shall deposit the amount of the penal sum into the standby trust fund.

(6) The penal sum of the bond shall be in an amount at least equal to the current closure cost estimate.

(7) Whenever the current closure cost estimate increases to an amount greater than the penal sum, the owner or operator, within 60 days after the increase, shall either cause the penal sum to be increased to an amount at least equal to the current closure cost estimate and submit evidence of such increase to

the Director, or obtain other financial assurance as specified in Section R315-264-143. Whenever the current closure cost estimate decreases, the penal sum may be reduced to the amount of the current closure cost estimate following written approval by the Director.

(8) Under the terms of the bond, the surety may cancel the bond by sending notice of cancellation by certified mail to the owner or operator and to the Director. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Director, as evidenced by the return receipts.

(9) The owner or operator may cancel the bond if the Director has given prior written consent. The Director shall provide such written consent when:

(i) An owner or operator substitutes alternate financial assurance as specified in Section R315-264-143; or

(ii) The Director releases the owner or operator from the requirements of Section R315-264-143 in accordance with Subsection R315-264-143(i).

(10) The surety shall not be liable for deficiencies in the performance of closure by the owner or operator after the Director releases the owner or operator from the requirements of Section R315-264-143 in accordance with Subsection R315-264-143(i).

(d) Closure letter of credit.

(1) An owner or operator may satisfy the requirements of Section R315-264-143 by obtaining an irrevocable standby letter of credit which conforms to the requirements of Subsection R315-264-143(d) and submitting the letter to the Director. An owner or operator of a new facility shall submit the letter of credit to the Director at least 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal. The letter of credit shall be effective before this initial receipt of hazardous waste. The issuing institution shall be an entity which has the authority to issue letters of credit and whose letter-of-credit operations are regulated and examined by a Federal or State agency.

(2) The wording of the letter of credit shall be identical to the wording specified in Subsection R315-264-151(d).

(3) An owner or operator who uses a letter of credit to satisfy the requirements of Section R315-264-143 shall also establish a standby trust fund. Under the terms of the letter of credit, all amounts paid pursuant to a draft by the Director shall be deposited by the issuing institution directly into the standby trust fund in accordance with instructions from the Director. This standby trust fund shall meet the requirements of the trust fund specified in Subsection R315-264-143(a), except that:

(i) An originally signed duplicate of the trust agreement shall be submitted to the Director with the letter of credit; and

(ii) Unless the standby trust fund is funded pursuant to the requirements of Section R315-264-143, the following are not required by Rule R315-264:

(A) Payments into the trust fund as specified in Subsection R315-264-143(a);

(B) Updating of Schedule A of the trust agreement, see Subsection R315-264-151(a), to show current closure cost estimates;

(C) Annual valuations as required by the trust agreement; and

(D) Notices of nonpayment as required by the trust agreement.

(4) The letter of credit shall be accompanied by a letter from the owner or operator referring to the letter of credit by number, issuing institution, and date, and providing the following information: the EPA Identification Number, name, and address of the facility, and the amount of funds assured for closure of the facility by the letter of credit.

(5) The letter of credit shall be irrevocable and issued for a period of at least 1 year. The letter of credit shall provide that

the expiration date shall be automatically extended for a period of at least 1 year unless, at least 120 days before the current expiration date, the issuing institution notifies both the owner or operator and the Director by certified mail of a decision not to extend the expiration date. Under the terms of the letter of credit, the 120 days shall begin on the date when both the owner or operator and the Director have received the notice, as evidenced by the return receipts.

(6) The letter of credit shall be issued in an amount at least equal to the current closure cost estimate, except as provided in Subsection R315-264-143(g).

(7) Whenever the current closure cost estimate increases to an amount greater than the amount of the credit, the owner or operator, within 60 days after the increase, shall either cause the amount of the credit to be increased so that it at least equals the current closure cost estimate and submit evidence of such increase to the Director, or obtain other financial assurance as specified in Section R315-264-143 to cover the increase. Whenever the current closure cost estimate decreases, the amount of the credit may be reduced to the amount of the current closure cost estimate following written approval by the Director.

(8) Following a final administrative determination pursuant to section 3008 of RCRA that the owner or operator has failed to perform final closure in accordance with the closure plan and other permit requirements when required to do so, the Director may draw on the letter of credit.

(9) If the owner or operator does not establish alternate financial assurance as specified in Section R315-264-143 and obtain written approval of such alternate assurance from the Director within 90 days after receipt by both the owner or operator and the Director of a notice from issuing institution that it has decided not to extend the letter of credit beyond the current expiration date, the Director shall draw on the letter of credit. The Director may delay the drawing if the issuing institution grants an extension of the term of the credit. During the last 30 days of any such extension the Director shall draw on the letter of credit if the owner or operator has failed to provide alternate financial assurance as specified in Section R315-264-143 and obtain written approval of such assurance from the Director.

(10) The Director shall return the letter of credit to the issuing institution for termination when:

(i) An owner or operator substitutes alternate financial assurance as specified in Section R315-264-143; or

(ii) The Director releases the owner or operator from the requirements of Section R315-264-143 in accordance with Subsection R315-264-143(i).

(e) Closure insurance.

(1) An owner or operator may satisfy the requirements of Section R315-264-143 by obtaining closure insurance which conforms to the requirements of this Subsection R315-264-143(e) and submitting a certificate of such insurance to the Director. An owner or operator of a new facility shall submit the certificate of insurance to the Director at least 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal. The insurance shall be effective before this initial receipt of hazardous waste. At a minimum, the insurer shall be licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States.

(2) The wording of the certificate of insurance shall be identical to the wording specified in Subsection R315-264-151(e).

(3) The closure insurance policy shall be issued for a face amount at least equal to the current closure cost estimate, except as provided in Subsection R315-264-143(g). The term "face amount" means the total amount the insurer is obligated to pay under the policy. Actual payments by the insurer shall not

change the face amount, although the insurer's future liability shall be lowered by the amount of the payments.

(4) The closure insurance policy shall guarantee that funds shall be available to close the facility whenever final closure occurs. The policy shall also guarantee that once final closure begins, the insurer will be responsible for paying out funds, up to an amount equal to the face amount of the policy, upon the direction of the Director, to such party or parties as the Director specifies.

(5) After beginning partial or final closure, an owner or operator or any other person authorized to conduct closure may request reimbursements for closure expenditures by submitting itemized bills to the Director. The owner or operator may request reimbursements for partial closure only if the remaining value of the policy is sufficient to cover the maximum costs of closing the facility over its remaining operating life. Within 60 days after receiving bills for closure activities, the Director shall instruct the insurer to make reimbursements in such amounts as the Director specifies in writing, if the Director determines that the partial or final closure expenditures are in accordance with the approved closure plan or otherwise justified. If the Director has reason to believe that the maximum cost of closure over the remaining life of the facility will be significantly greater than the face amount of the policy, he may withhold reimbursements of such amounts as he deems prudent until he determines, in accordance with Subsection R315-264-143(i), that the owner or operator is no longer required to maintain financial assurance for final closure of the facility. If the Director does not instruct the insurer to make such reimbursements, he shall provide the owner or operator with a detailed written statement of reasons.

(6) The owner or operator shall maintain the policy in full force and effect until the Director consents to termination of the policy by the owner or operator as specified in Subsection R315-264-143(e)(10). Failure to pay the premium, without substitution of alternate financial assurance as specified in Section R315-264-143, shall constitute a significant violation of these regulations, warranting such remedy as the Director deems necessary. Such violation shall be deemed to begin upon receipt by the Director of a notice of future cancellation, termination, or failure to renew due to nonpayment of the premium, rather than upon the date of expiration.

(7) Each policy shall contain a provision allowing assignment of the policy to a successor owner or operator. Such assignment may be conditional upon consent of the insurer, provided such consent is not unreasonably refused.

(8) The policy shall provide that the insurer may not cancel, terminate, or fail to renew the policy except for failure to pay the premium. The automatic renewal of the policy shall, at a minimum, provide the insured with the option of renewal at the face amount of the expiring policy. If there is a failure to pay the premium, the insurer may elect to cancel, terminate, or fail to renew the policy by sending notice by certified mail to the owner or operator and the Director. Cancellation, termination, or failure to renew may not occur, however, during the 120 days beginning with the date of receipt of the notice by both the Director and the owner or operator, as evidenced by the return receipts. Cancellation, termination, or failure to renew may not occur and the policy shall remain in full force and effect in the event that on or before the date of expiration:

(i) The Director deems the facility abandoned; or

(ii) The permit is terminated or revoked or a new permit is denied; or

(iii) Closure is ordered by the Director or a U.S. district court or other court of competent jurisdiction; or

(iv) The owner or operator is named as debtor in a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code; or

(v) The premium due is paid.

(9) Whenever the current closure cost estimate increases

to an amount greater than the face amount of the policy, the owner or operator, within 60 days after the increase, shall either cause the face amount to be increased to an amount at least equal to the current closure cost estimate and submit evidence of such increase to the Director, or obtain other financial assurance as specified in Section R315-264-143 to cover the increase. Whenever the current closure cost estimate decreases, the face amount may be reduced to the amount of the current closure cost estimate following written approval by the Director.

(10) The Director shall give written consent to the owner or operator that he may terminate the insurance policy when:

(i) An owner or operator substitutes alternate financial assurance as specified in Section R315-264-143; or

(ii) The Director releases the owner or operator from the requirements of Section R315-264-143 in accordance with Subsection R315-264-143(i).

(f) Financial test and corporate guarantee for closure.

(1) An owner or operator may satisfy the requirements of Section R315-264-143 by demonstrating that he passes a financial test as specified in Subsection R315-264-143(f). To pass this test the owner or operator shall meet the criteria of either Subsections R315-264-143(f)(1)(i) or (ii):

(i) The owner or operator shall have:

(A) Two of the following three ratios: a ratio of total liabilities to net worth less than 2.0; a ratio of the sum of net income plus depreciation, depletion, and amortization to total liabilities greater than 0.1; and a ratio of current assets to current liabilities greater than 1.5; and

(B) Net working capital and tangible net worth each at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates; and

(C) Tangible net worth of at least \$10 million; and

(D) Assets located in the United States amounting to at least 90 percent of total assets or at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates.

(ii) The owner or operator shall have:

(A) A current rating for his most recent bond issuance of AAA, AA, A, or BBB as issued by Standard and Poor's or Aaa, Aa, A, or Baa as issued by Moody's; and

(B) Tangible net worth at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates; and

(C) Tangible net worth of at least \$10 million; and

(D) Assets located in the United States amounting to at least 90 percent of total assets or at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates.

(2) The phrase "current closure and post-closure cost estimates" as used in Subsection R315-264-143(f)(1) refers to the cost estimates required to be shown in paragraphs 1-4 of the letter from the owner's or operator's chief financial officer, Subsection R315-264-151(f). The phrase "current plugging and abandonment cost estimates" as used in Subsection R315-264-143(f)(1) refers to the cost estimates required to be shown in paragraphs 1-4 of the letter from the owner's or operator's chief financial officer, 40 CFR 144.70(f).

(3) To demonstrate that he meets this test, the owner or operator shall submit the following items to the Director:

(i) A letter signed by the owner's or operator's chief financial officer and worded as specified in Subsection R315-264-151(f); and

(ii) A copy of the independent certified public accountant's report on examination of the owner's or operator's financial statements for the latest completed fiscal year; and

(iii) A special report from the owner's or operator's independent certified public accountant to the owner or operator stating that:

(A) He has compared the data which the letter from the chief financial officer specifies as having been derived from the independently audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements; and

(B) In connection with that procedure, no matters came to his attention which caused him to believe that the specified data should be adjusted.

(4) An owner or operator of a new facility shall submit the items specified in Subsection R315-264-143(f)(3) to the Director at least 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal.

(5) After the initial submission of items specified in Subsection R315-264-143(f)(3), the owner or operator shall send updated information to the Director within 90 days after the close of each succeeding fiscal year. This information shall consist of all three items specified in Subsection R315-264-143(f)(3).

(6) If the owner or operator no longer meets the requirements of Subsection R315-264-143(f)(1), he shall send notice to the Director of intent to establish alternate financial assurance as specified in Section R315-264-143. The notice shall be sent by certified mail within 90 days after the end of the fiscal year for which the year-end financial data show that the owner or operator no longer meets the requirements. The owner or operator shall provide the alternate financial assurance within 120 days after the end of such fiscal year.

(7) The Director may, based on a reasonable belief that the owner or operator may no longer meet the requirements of Subsection R315-264-143(f)(1), require reports of financial condition at any time from the owner or operator in addition to those specified in Subsection R315-264-143(f)(3). If the Director finds, on the basis of such reports or other information, that the owner or operator no longer meets the requirements of Subsection R315-264-143(f)(1), the owner or operator shall provide alternate financial assurance as specified in Section R315-264-143 within 30 days after notification of such a finding.

(8) The Director may disallow use of this test on the basis of qualifications in the opinion expressed by the independent certified public accountant in his report on examination of the owner's or operator's financial statements, see Subsection R315-264-143(f)(3)(ii). An adverse opinion or a disclaimer of opinion shall be cause for disallowance. The Director shall evaluate other qualifications on an individual basis. The owner or operator shall provide alternate financial assurance as specified in Section R315-264-143 within 30 days after notification of the disallowance.

(9) The owner or operator is no longer required to submit the items specified in Subsection R315-264-143(f)(3) when:

(i) An owner or operator substitutes alternate financial assurance as specified in Section R315-264-143; or

(ii) The Director releases the owner or operator from the requirements of Section R315-264-143 in accordance with Subsection R315-264-143(i).

(10) An owner or operator may meet the requirements of Section R315-264-143 by obtaining a written guarantee. The guarantor shall be the direct or higher-tier parent corporation of the owner or operator, a firm whose parent corporation is also the parent corporation of the owner or operator, or a firm with a "substantial business relationship" with the owner or operator. The guarantor shall meet the requirements for owners or operators in Subsection R315-264-143(f)(1) through (8) and shall comply with the terms of the guarantee. The wording of the guarantee shall be identical to the wording specified in Subsection R315-264-151(h). The certified copy of the guarantee shall accompany the items sent to the Director as specified in Subsection R315-264-143(f)(3). One of these items shall be the letter from the guarantor's chief financial officer. If

the guarantor's parent corporation is also the parent corporation of the owner or operator, the letter shall describe the value received in consideration of the guarantee. If the guarantor is a firm with a "substantial business relationship" with the owner or operator, this letter shall describe this "substantial business relationship" and the value received in consideration of the guarantee. The terms of the guarantee shall provide that:

(i) If the owner or operator fails to perform final closure of a facility covered by the corporate guarantee in accordance with the closure plan and other permit requirements whenever required to do so, the guarantor shall do so or establish a trust fund as specified in Subsection R315-264-143(a) in the name of the owner or operator.

(ii) The corporate guarantee shall remain in force unless the guarantor sends notice of cancellation by certified mail to the owner or operator and to the Director. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Director, as evidenced by the return receipts.

(iii) If the owner or operator fails to provide alternate financial assurance as specified in Section R315-264-143 and obtain the written approval of such alternate assurance from the Director within 90 days after receipt by both the owner or operator and the Director of a notice of cancellation of the corporate guarantee from the guarantor, the guarantor shall provide such alternative financial assurance in the name of the owner or operator.

(g) Use of multiple financial mechanisms. An owner or operator may satisfy the requirements of Section R315-264-143 by establishing more than one financial mechanism per facility. These mechanisms are limited to trust funds, surety bonds guaranteeing payment into a trust fund, letters of credit, and insurance. The mechanisms shall be as specified in Subsections R315-264-143(a), (b), (d), and (e), respectively, except that it is the combination of mechanisms, rather than the single mechanism, which shall provide financial assurance for an amount at least equal to the current closure cost estimate. If an owner or operator uses a trust fund in combination with a surety bond or a letter of credit, he may use the trust fund as the standby trust fund for the other mechanisms. A single standby trust fund may be established for two or more mechanisms. The Director may use any or all of the mechanisms to provide for closure of the facility.

(h) Use of a financial mechanism for multiple facilities. An owner or operator may use a financial assurance mechanism specified in Section R315-264-143 to meet the requirements of Section R315-264-143 for more than one facility. Evidence of financial assurance submitted to the Director shall include a list showing, for each facility, the EPA Identification Number, name, address, and the amount of funds for closure assured by the mechanism. If the facilities covered by the mechanism are in more than one State, identical evidence of financial assurance shall be submitted to and maintained with the State Agency regulating hazardous waste in states other than Utah or with the appropriate Regional Administrator if the facility is located in an unauthorized State. The amount of funds available through the mechanism shall be no less than the sum of funds that would be available if a separate mechanism had been established and maintained for each facility. In directing funds available through the mechanism for closure of any of the facilities covered by the mechanism, the Director may direct only the amount of funds designated for that facility, unless the owner or operator agrees to the use of additional funds available under the mechanism.

(i) Release of the owner or operator from the requirements of Section R315-264-143. Within 60 days after receiving certifications from the owner or operator and a qualified Professional Engineer that final closure has been completed in accordance with the approved closure plan, the Director shall

notify the owner or operator in writing that he is no longer required by Section R315-264-143 to maintain financial assurance for final closure of the facility, unless the Director has reason to believe that final closure has not been in accordance with the approved closure plan. The Director shall provide the owner or operator a detailed written statement of any such reason to believe that closure has not been in accordance with the approved closure plan.

R315-264-144. Cost Estimate for Post-Closure Care.

(a) The owner or operator of a disposal surface impoundment, disposal miscellaneous unit, land treatment unit, or landfill unit, or of a surface impoundment or waste pile required under Sections R315-264-228 and 258 to prepare a contingent closure and post-closure plan, shall have a detailed written estimate, in current dollars, of the annual cost of post-closure monitoring and maintenance of the facility in accordance with the applicable post-closure regulations in Sections R315-264-117 through 120, 228, 258, 280, 310, and 603.

(1) The post-closure cost estimate shall be based on the costs to the owner or operator of hiring a third party to conduct post-closure care activities. A third party is a party who is neither a parent nor a subsidiary of the owner or operator. See definition of parent corporation in Subsection R315-264-141(d).

(2) The post-closure cost estimate is calculated by multiplying the annual post-closure cost estimate by the number of years of post-closure care required under Section R315-264-117.

(b) During the active life of the facility, the owner or operator shall adjust the post-closure cost estimate for inflation within 60 days prior to the anniversary date of the establishment of the financial instrument(s) used to comply with Section R315-264-145. For owners or operators using the financial test or corporate guarantee, the post-closure cost estimate shall be updated for inflation within 30 days after the close of the firm's fiscal year and before the submission of updated information to the Director as specified in Subsection R315-264-145(f)(5). The adjustment may be made by recalculating the post-closure cost estimate in current dollars or by using an inflation factor derived from the most recent Implicit Price Deflator for Gross National Product published by the U.S. Department of Commerce in its Survey of Current Business as specified in Subsections R315-264-145(b)(1) and (2). The inflation factor is the result of dividing the latest published annual Deflator by the Deflator for the previous year.

(1) The first adjustment is made by multiplying the post-closure cost estimate by the inflation factor. The result is the adjusted post-closure cost estimate.

(2) Subsequent adjustments are made by multiplying the latest adjusted post-closure cost estimate by the latest inflation factor.

(c) During the active life of the facility, the owner or operator shall revise the post-closure cost estimate within 30 days after the Director has approved the request to modify the post-closure plan, if the change in the post-closure plan increases the cost of post-closure care. The revised post-closure cost estimate shall be adjusted for inflation as specified in Subsection R315-264-144(b).

(d) The owner or operator shall keep the following at the facility during the operating life of the facility: The latest post-closure cost estimate prepared in accordance with Subsection R315-264-144(a) and (c) and, when this estimate has been adjusted in accordance with Subsection R315-264-144(b), the latest adjusted post-closure cost estimate.

R315-264-145. Financial Assurance for Post-Closure Care.

The owner or operator of a hazardous waste management unit subject to the requirements of Section R315-264-144 shall

establish financial assurance for post-closure care in accordance with the approved post-closure plan for the facility 60 days prior to the initial receipt of hazardous waste or the effective date of the regulation, whichever is later. He shall choose from the following options:

(a) Post-closure trust fund.

(1) An owner or operator may satisfy the requirements of Section R315-264-144 by establishing a post-closure trust fund which conforms to the requirements of Subsection R315-264-145(a) and submitting an originally signed duplicate of the trust agreement to the Director. An owner or operator of a new facility shall submit the originally signed duplicate of the trust agreement to the Director at least 60 days before the date on which hazardous waste is first received for disposal. The trustee shall be an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a Federal or State agency.

(2) The wording of the trust agreement shall be identical to the wording specified in Subsection R315-264-151(a)(1), and the trust agreement shall be accompanied by a formal certification of acknowledgment, for example, see Subsection R315-264-151(a)(2). Schedule A of the trust agreement shall be updated within 60 days after a change in the amount of the current post-closure cost estimate covered by the agreement.

(3) Payments into the trust fund shall be made annually by the owner or operator over the term of the initial RCRA permit or over the remaining operating life of the facility as estimated in the closure plan, whichever period is shorter; this period is hereafter referred to as the "pay-in period." The payments into the post-closure trust fund shall be made as follows:

(i) For a new facility, the first payment shall be made before the initial receipt of hazardous waste for disposal. A receipt from the trustee for this payment shall be submitted by the owner or operator to the Director before this initial receipt of hazardous waste. The first payment shall be at least equal to the current post-closure cost estimate, except as provided in Subsection R315-264-145(g), divided by the number of years in the pay-in period. Subsequent payments shall be made no later than 30 days after each anniversary date of the first payment. The amount of each subsequent payment shall be determined by this formula:

$$\text{Next payment} = (\text{CE}-\text{CV})/\text{Y}$$

where CE is the current post-closure cost estimate, CV is the current value of the trust fund, and Y is the number of years remaining in the pay-in period.

(ii) If an owner or operator establishes a trust fund as specified in 40 CFR 265.145(a); which is adopted by reference, and the value of that trust fund is less than the current post-closure cost estimate when a permit is awarded for the facility, the amount of the current post-closure cost estimate still to be paid into the fund shall be paid in over the pay-in period as defined in Subsection R315-264-145(a)(3). Payments shall continue to be made no later than 30 days after each anniversary date of the first payment made pursuant to R315-265. The amount of each payment shall be determined by this formula:

$$\text{Next payment} = (\text{CE}-\text{CV})/\text{Y}$$

where CE is the current post-closure cost estimate, CV is the current value of the trust fund, and Y is the number of years remaining in the pay-in period.

(4) The owner or operator may accelerate payments into the trust fund or he may deposit the full amount of the current post-closure cost estimate at the time the fund is established. However, he shall maintain the value of the fund at no less than the value that the fund would have if annual payments were made as specified in Subsection R315-264-145(a)(3).

(5) If the owner or operator establishes a post-closure trust fund after having used one or more alternate mechanisms specified in Section R315-264-145 or in 40 CFR 265.145, which is adopted by reference; his first payment shall be in at

least the amount that the fund would contain if the trust fund were established initially and annual payments made according to specifications of Subsection R315-264-145(a) and 40 CFR 265.145(a), which is adopted by reference; as applicable.

(6) After the pay-in period is completed, whenever the current post-closure cost estimate changes during the operating life of the facility, the owner or operator shall compare the new estimate with the trustee's most recent annual valuation of the trust fund. If the value of the fund is less than the amount of the new estimate, the owner or operator, within 60 days after the change in the cost estimate, shall either deposit an amount into the fund so that its value after this deposit at least equals the amount of the current post-closure cost estimate, or obtain other financial assurance as specified in Section R315-264-145 to cover the difference.

(7) During the operating life of the facility, if the value of the trust fund is greater than the total amount of the current post-closure cost estimate, the owner or operator may submit a written request to the Director for release of the amount in excess of the current post-closure cost estimate.

(8) If an owner or operator substitutes other financial assurance as specified in Section R315-264-145 for all or part of the trust fund, he may submit a written request to the Director for release of the amount in excess of the current post-closure cost estimate covered by the trust fund.

(9) Within 60 days after receiving a request from the owner or operator for release of funds as specified in Subsection R315-264-145(a)(7) or (8), the Director shall instruct the trustee to release to the owner or operator such funds as the Director specifies in writing.

(10) During the period of post-closure care, the Director may approve a release of funds if the owner or operator demonstrates to the Director that the value of the trust fund exceeds the remaining cost of post-closure care.

(11) An owner or operator or any other person authorized to conduct post-closure care may request reimbursements for post-closure care expenditures by submitting itemized bills to the Director. Within 60 days after receiving bills for post-closure care activities, the Director shall instruct the trustee to make reimbursements in those amounts as the Director specifies in writing, if the Director determines that the post-closure care expenditures are in accordance with the approved post-closure plan or otherwise justified. If the Director does not instruct the trustee to make such reimbursements, he shall provide the owner or operator with a detailed written statement of reasons.

(12) The Director shall agree to termination of the trust when:

(i) An owner or operator substitutes alternate financial assurance as specified in Section R315-264-145; or

(ii) The Director releases the owner or operator from the requirements of Section R315-264-145 in accordance with Subsection R315-264-145(i).

(b) Surety bond guaranteeing payment into a post-closure trust fund.

(1) An owner or operator may satisfy the requirements of Section R315-264-145 by obtaining a surety bond which conforms to the requirements of Subsection R315-264-145(b) and submitting the bond to the Director. An owner or operator of a new facility shall submit the bond to the Director at least 60 days before the date on which hazardous waste is first received for disposal. The bond shall be effective before this initial receipt of hazardous waste. The surety company issuing the bond shall, at a minimum, be among those listed as acceptable sureties on Federal bonds in Circular 570 of the U.S. Department of the Treasury.

(2) The wording of the surety bond shall be identical to the wording specified in Subsection R315-264-151(b).

(3) The owner or operator who uses a surety bond to satisfy the requirements Section R315-264-145 shall also

establish a standby trust fund. Under the terms of the bond, all payments made thereunder shall be deposited by the surety directly into the standby trust fund in accordance with instructions from the Director. This standby trust fund shall meet the requirements specified in Subsection R315-264-145(a), except that:

(i) An originally signed duplicate of the trust agreement shall be submitted to the Director with the surety bond; and

(ii) Until the standby trust fund is funded pursuant to the requirements Section R315-264-145, the following are not required by these regulations:

(A) Payments into the trust fund as specified in Subsection R315-264-145(a);

(B) Updating of Schedule A of the trust agreement, see Subsection R315-264-151(a), to show current post-closure cost estimates;

(C) Annual valuations as required by the trust agreement; and

(D) Notices of nonpayment as required by the trust agreement.

(4) The bond shall guarantee that the owner or operator shall:

(i) Fund the standby trust fund in an amount equal to the penal sum of the bond before the beginning of final closure of the facility; or

(ii) Fund the standby trust fund in an amount equal to the penal sum within 15 days after an administrative order to begin final closure issued by the Director becomes final, or within 15 days after an order to begin final closure is issued by a U.S. district court or other court of competent jurisdiction; or

(iii) Provide alternate financial assurance as specified in Section R315-264-145, and obtain the Director's written approval of the assurance provided, within 90 days after receipt by both the owner or operator and the Director of a notice of cancellation of the bond from the surety.

(5) Under the terms of the bond, the surety shall become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond.

(6) The penal sum of the bond shall be in an amount at least equal to the current post-closure cost estimate, except as provided in Subsection R315-264-145(g).

(7) Whenever the current post-closure cost estimate increases to an amount greater than the penal sum, the owner or operator, within 60 days after the increase, shall either cause the penal sum to be increased to an amount at least equal to the current post-closure cost estimate and submit evidence of such increase to the Director, or obtain other financial assurance as specified in Section R315-264-145 to cover the increase. Whenever the current post-closure cost estimate decreases, the penal sum may be reduced to the amount of the current post-closure cost estimate following written approval by the Director.

(8) Under the terms of the bond, the surety may cancel the bond by sending notice of cancellation by certified mail to the owner or operator and to the Director. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Director, as evidenced by the return receipts.

(9) The owner or operator may cancel the bond if the Director has given prior written consent based on his receipt of evidence of alternate financial assurance as specified in Section R315-264-145.

(c) Surety bond guaranteeing performance of post-closure care.

(1) An owner or operator may satisfy the requirements of Section R315-264-145 by obtaining a surety bond which conforms to the requirements of Subsection R315-264-145(c) and submitting the bond to the Director. An owner or operator of a new facility shall submit the bond to the Director at least 60 days before the date on which hazardous waste is first received

for disposal. The bond shall be effective before this initial receipt of hazardous waste. The surety company issuing the bond shall, at a minimum, be among those listed as acceptable sureties on Federal bonds in Circular 570 of the U.S. Department of the Treasury.

(2) The wording of the surety bond shall be identical to the wording specified in Subsection R315-264-151(c).

(3) The owner or operator who uses a surety bond to satisfy the requirements of Section R315-264-145 shall also establish a standby trust fund. Under the terms of the bond, all payments made thereunder shall be deposited by the surety directly into the standby trust fund in accordance with instructions from the Director. This standby trust fund shall meet the requirements specified in Subsection R315-264-145(a), except that:

(i) An originally signed duplicate of the trust agreement shall be submitted to the Director with the surety bond; and

(ii) Unless the standby trust fund is funded pursuant to the requirements of Section R315-264-145, the following are not required by these regulations:

(A) Payments into the trust fund as specified in Subsection R315-264-145(a);

(B) Updating of Schedule A of the trust agreement, see Subsection R315-264-151(a), to show current post-closure cost estimates;

(C) Annual valuations as required by the trust agreement; and

(D) Notices of nonpayment as required by the trust agreement.

(4) The bond shall guarantee that the owner or operator shall:

(i) Perform post-closure care in accordance with the post-closure plan and other requirements of the permit for the facility; or

(ii) Provide alternate financial assurance as specified in Section R315-264-145, and obtain the Director's written approval of the assurance provided, within 90 days of receipt by both the owner or operator and the Director of a notice of cancellation of the bond from the surety.

(5) Under the terms of the bond, the surety shall become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond. Following a final administrative determination pursuant to section 3008 of RCRA that the owner or operator has failed to perform post-closure care in accordance with the approved post-closure plan and other permit requirements, under the terms of the bond the surety shall perform post-closure care in accordance with the post-closure plan and other permit requirements or shall deposit the amount of the penal sum into the standby trust fund.

(6) The penal sum of the bond shall be in an amount at least equal to the current post-closure cost estimate.

(7) Whenever the current post-closure cost estimate increases to an amount greater than the penal sum during the operating life of the facility, the owner or operator, within 60 days after the increase, shall either cause the penal sum to be increased to an amount at least equal to the current post-closure cost estimate and submit evidence of such increase to the Director, or obtain other financial assurance as specified in Section R315-264-145. Whenever the current post-closure cost estimate decreases during the operating life of the facility, the penal sum may be reduced to the amount of the current post-closure cost estimate following written approval by the Director.

(8) During the period of post-closure care, the Director may approve a decrease in the penal sum if the owner or operator demonstrates to the Director that the amount exceeds the remaining cost of post-closure care.

(9) Under the terms of the bond, the surety may cancel the bond by sending notice of cancellation by certified mail to the owner or operator and to the Director. Cancellation may not

occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Director, as evidenced by the return receipts.

(10) The owner or operator may cancel the bond if the Director has given prior written consent. The Director shall provide such written consent when:

(i) An owner or operator substitutes alternate financial assurance as specified in Section R315-264-145; or

(ii) The Director releases the owner or operator from the requirements of Section R315-264-145 in accordance with Subsection R315-264-145(i).

(11) The surety shall not be liable for deficiencies in the performance of post-closure care by the owner or operator after the Director releases the owner or operator from the requirements of Section R315-264-145 in accordance with Subsection R315-264-145(i).

(d) Post-closure letter of credit.

(1) An owner or operator may satisfy the requirements of Section R315-264-145 by obtaining an irrevocable standby letter of credit which conforms to the requirements of Subsection R315-264-145(d) and submitting the letter to the Director. An owner or operator of a new facility shall submit the letter of credit to the Director at least 60 days before the date on which hazardous waste is first received for disposal. The letter of credit shall be effective before this initial receipt of hazardous waste. The issuing institution shall be an entity which has the authority to issue letters of credit and whose letter-of-credit operations are regulated and examined by a Federal or State agency.

(2) The wording of the letter of credit shall be identical to the wording specified in Subsection R315-264-151(d).

(3) An owner or operator who uses a letter of credit to satisfy the requirements of Section R315-264-145 shall also establish a standby trust fund. Under the terms of the letter of credit, all amounts paid pursuant to a draft by the Director shall be deposited by the issuing institution directly into the standby trust fund in accordance with instructions from the Director. This standby trust fund shall meet the requirements of the trust fund specified in Subsection R315-264-145(a), except that:

(i) An originally signed duplicate of the trust agreement shall be submitted to the Director with the letter of credit; and

(ii) Unless the standby trust fund is funded pursuant to the requirements of Section R315-264-145, the following are not required by these regulations:

(A) Payments into the trust fund as specified in Subsection R315-264-145(a);

(B) Updating of Schedule A of the trust agreement, see Subsection R315-264-151(a), to show current post-closure cost estimates;

(C) Annual valuations as required by the trust agreement; and

(D) Notices of nonpayment as required by the trust agreement.

(4) The letter of credit shall be accompanied by a letter from the owner or operator referring to the letter of credit by number, issuing institution, and date, and providing the following information: the EPA Identification Number, name, and address of the facility, and the amount of funds assured for post-closure care of the facility by the letter of credit.

(5) The letter of credit shall be irrevocable and issued for a period of at least 1 year. The letter of credit shall provide that the expiration date shall be automatically extended for a period of at least 1 year unless, at least 120 days before the current expiration date, the issuing institution notifies both the owner or operator and the Director by certified mail of a decision not to extend the expiration date. Under the terms of the letter of credit, the 120 days shall begin on the date when both the owner or operator and the Director have received the notice, as evidenced by the return receipts.

(6) The letter of credit shall be issued in an amount at least equal to the current post-closure cost estimate, except as provided in Subsection R315-264-145(g).

(7) Whenever the current post-closure cost estimate increases to an amount greater than the amount of the credit during the operating life of the facility, the owner or operator, within 60 days after the increase, shall either cause the amount of the credit to be increased so that it at least equals the current post-closure cost estimate and submit evidence of such increase to the Director, or obtain other financial assurance as specified in Section R315-264-145 to cover the increase. Whenever the current post-closure cost estimate decreases during the operating life of the facility, the amount of the credit may be reduced to the amount of the current post-closure cost estimate following written approval by the Director.

(8) During the period of post-closure care, the Director may approve a decrease in the amount of the letter of credit if the owner or operator demonstrates to the Director that the amount exceeds the remaining cost of post-closure care.

(9) Following a final administrative determination pursuant to section 3008 of RCRA that the owner or operator has failed to perform post-closure care in accordance with the approved post-closure plan and other permit requirements, the Director may draw on the letter of credit.

(10) If the owner or operator does not establish alternate financial assurance as specified in Section R315-264-145 and obtain written approval of such alternate assurance from the Director within 90 days after receipt by both the owner or operator and the Director of a notice from the issuing institution that it has decided not to extend the letter of credit beyond the current expiration date, the Director shall draw on the letter of credit. The Director may delay the drawing if the issuing institution grants an extension of the term of the credit. During the last 30 days of any such extension the Director shall draw on the letter of credit if the owner or operator has failed to provide alternate financial assurance as specified in Section R315-264-145 and obtain written approval of such assurance from the Director.

(11) The Director shall return the letter of credit to the issuing institution for termination when:

(i) An owner or operator substitutes alternate financial assurance as specified in Section R315-264-145; or

(ii) The Director releases the owner or operator from the requirements of Section R315-264-145 in accordance with Subsection R315-264-145(i).

(e) Post-closure insurance.

(1) An owner or operator may satisfy the requirements of Section R315-264-145 by obtaining post-closure insurance which conforms to the requirements of Subsection R315-264-145(e) and submitting a certificate of such insurance to the Director. An owner or operator of a new facility shall submit the certificate of insurance to the Director at least 60 days before the date on which hazardous waste is first received for disposal. The insurance shall be effective before this initial receipt of hazardous waste. At a minimum, the insurer shall be licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States.

(2) The wording of the certificate of insurance shall be identical to the wording specified in Subsection R315-264-151(e).

(3) The post-closure insurance policy shall be issued for a face amount at least equal to the current post-closure cost estimate, except as provided in Subsection R315-264-145(g). The term "face amount" means the total amount the insurer is obligated to pay under the policy. Actual payments by the insurer shall not change the face amount, although the insurer's future liability will be lowered by the amount of the payments.

(4) The post-closure insurance policy shall guarantee that

funds will be available to provide post-closure care of the facility whenever the post-closure period begins. The policy shall also guarantee that once post-closure care begins, the insurer will be responsible for paying out funds, up to an amount equal to the face amount of the policy, upon the direction of the Director, to such party or parties as the Director specifies.

(5) An owner or operator or any other person authorized to conduct post-closure care may request reimbursements for post-closure care expenditures by submitting itemized bills to the Director. Within 60 days after receiving bills for post-closure care activities, the Director shall instruct the insurer to make reimbursements in those amounts as the Director specifies in writing, if the Director determines that the post-closure care expenditures are in accordance with the approved post-closure plan or otherwise justified. If the Director does not instruct the insurer to make such reimbursements, he shall provide the owner or operator with a detailed written statement of reasons.

(6) The owner or operator shall maintain the policy in full force and effect until the Director consents to termination of the policy by the owner or operator as specified in Subsection R315-264-145(e)(11). Failure to pay the premium, without substitution of alternate financial assurance as specified in Section R315-264-145, shall constitute a significant violation of these regulations, warranting such remedy as the Director deems necessary. Such violation shall be deemed to begin upon receipt by the Director of a notice of future cancellation, termination, or failure to renew due to nonpayment of the premium, rather than upon the date of expiration.

(7) Each policy shall contain a provision allowing assignment of the policy to a successor owner or operator. Such assignment may be conditional upon consent of the insurer, provided such consent is not unreasonably refused.

(8) The policy shall provide that the insurer may not cancel, terminate, or fail to renew the policy except for failure to pay the premium. The automatic renewal of the policy shall, at a minimum, provide the insured with the option of renewal at the face amount of the expiring policy. If there is a failure to pay the premium, the insurer may elect to cancel, terminate, or fail to renew the policy by sending notice by certified mail to the owner or operator and the Director. Cancellation, termination, or failure to renew may not occur, however, during the 120 days beginning with the date of receipt of the notice by both the Director and the owner or operator, as evidenced by the return receipts. Cancellation, termination, or failure to renew may not occur and the policy shall remain in full force and effect in the event that on or before the date of expiration:

(i) The Director deems the facility abandoned; or

(ii) The permit is terminated or revoked or a new permit is denied; or

(iii) Closure is ordered by the Director or a U.S. district court or other court of competent jurisdiction; or

(iv) The owner or operator is named as debtor in a voluntary or involuntary proceeding under Title 11, Bankruptcy, U.S. Code; or

(v) The premium due is paid.

(9) Whenever the current post-closure cost estimate increases to an amount greater than the face amount of the policy during the operating life of the facility, the owner or operator, within 60 days after the increase, shall either cause the face amount to be increased to an amount at least equal to the current post-closure cost estimate and submit evidence of such increase to the Director, or obtain other financial assurance as specified in Section R315-264-145 to cover the increase. Whenever the current post-closure cost estimate decreases during the operating life of the facility, the face amount may be reduced to the amount of the current post-closure cost estimate following written approval by the Director.

(10) Commencing on the date that liability to make

payments pursuant to the policy accrues, the insurer shall thereafter annually increase the face amount of the policy. Such increase shall be equivalent to the face amount of the policy, less any payments made, multiplied by an amount equivalent to 85 percent of the most recent investment rate or of the equivalent coupon-issue yield announced by the U.S. Treasury for 26-week Treasury securities.

(11) The Director shall give written consent to the owner or operator that he may terminate the insurance policy when:

(i) An owner or operator substitutes alternate financial assurance as specified in Section R315-264-145; or

(ii) The Director releases the owner or operator from the requirements of Section R315-264-145 in accordance with Subsection R315-264-145(i).

(f) Financial test and corporate guarantee for post-closure care.

(1) An owner or operator may satisfy the requirements of Section R315-264-145 by demonstrating that he passes a financial test as specified in Subsection R315-264-145(f). To pass this test the owner or operator shall meet the criteria of either Subsection R315-264-145(f)(1)(i) or (ii):

(i) The owner or operator shall have:

(A) Two of the following three ratios: a ratio of total liabilities to net worth less than 2.0; a ratio of the sum of net income plus depreciation, depletion, and amortization to total liabilities greater than 0.1; and a ratio of current assets to current liabilities greater than 1.5; and

(B) Net working capital and tangible net worth each at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates; and

(C) Tangible net worth of at least \$10 million; and

(D) Assets in the United States amounting to at least 90 percent of his total assets or at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates.

(ii) The owner or operator shall have:

(A) A current rating for his most recent bond issuance of AAA, AA, A, or BBB as issued by Standard and Poor's or Aaa, Aa, A or Baa as issued by Moody's; and

(B) Tangible net worth at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates; and

(C) Tangible net worth of at least \$10 million; and

(D) Assets located in the United States amounting to at least 90 percent of his total assets or at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates.

(2) The phrase "current closure and post-closure cost estimates" as used in Subsection R315-264-145(f)(1) refers to the cost estimates required to be shown in paragraphs 1-4 of the letter from the owner's or operator's chief financial officer, Subsection R315-264-151(f). The phrase "current plugging and abandonment cost estimates" as used in Subsection R315-264-145(f)(1) refers to the cost estimates required to be shown in paragraphs 1-4 of the letter from the owner's or operator's chief financial officer, 40 CFR 144.70(f).

(3) To demonstrate that he meets this test, the owner or operator shall submit the following items to the Director:

(i) A letter signed by the owner's or operator's chief financial officer and worded as specified in Subsection R315-264-151(f); and

(ii) A copy of the independent certified public accountant's report on examination of the owner's or operator's financial statements for the latest completed fiscal year; and

(iii) A special report from the owner's or operator's independent certified public accountant to the owner or operator stating that:

(A) He has compared the data which the letter from the

chief financial officer specifies as having been derived from the independently audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements; and

(B) In connection with that procedure, no matters came to his attention which caused him to believe that the specified data should be adjusted.

(4) An owner or operator of a new facility shall submit the items specified in Subsection R315-264-145(f)(3) to the Director at least 60 days before the date on which hazardous waste is first received for disposal.

(5) After the initial submission of items specified in Subsection R315-264-145(f)(3), the owner or operator shall send updated information to the Director within 90 days after the close of each succeeding fiscal year. This information shall consist of all three items specified in Subsection R315-264-145(f)(3).

(6) If the owner or operator no longer meets the requirements of Subsection R315-264-145(f)(1), he shall send notice to the Director of intent to establish alternate financial assurance as specified in Section R315-264-145. The notice shall be sent by certified mail within 90 days after the end of the fiscal year for which the year-end financial data show that the owner or operator no longer meets the requirements. The owner or operator shall provide the alternate financial assurance within 120 days after the end of such fiscal year.

(7) The Director may, based on a reasonable belief that the owner or operator may no longer meet the requirements of Subsection R315-264-145(f)(1), require reports of financial condition at any time from the owner or operator in addition to those specified in Subsection R315-264-145(f)(3). If the Director finds, on the basis of such reports or other information, that the owner or operator no longer meets the requirements of Subsection R315-264-145(f)(1), the owner or operator shall provide alternate financial assurance as specified in Section R315-264-145 within 30 days after notification of such a finding.

(8) The Director may disallow use of this test on the basis of qualifications in the opinion expressed by the independent certified public accountant in his report on examination of the owner's or operator's financial statements, see Subsection R315-264-145(f)(3)(ii). An adverse opinion or a disclaimer of opinion shall be cause for disallowance. The Director shall evaluate other qualifications on an individual basis. The owner or operator shall provide alternate financial assurance as specified in Section R315-264-145 within 30 days after notification of the disallowance.

(9) During the period of post-closure care, the Director may approve a decrease in the current post-closure cost estimate for which this test demonstrates financial assurance if the owner or operator demonstrates to the Director that the amount of the cost estimate exceeds the remaining cost of post-closure care.

(10) The owner or operator is no longer required to submit the items specified in Subsection R315-264-145(f)(3) when:

(i) An owner or operator substitutes alternate financial assurance as specified in Section R315-264-145; or

(ii) The Director releases the owner or operator from the requirements of Section R315-264-145 in accordance with Subsection R315-264-145(i).

(11) An owner or operator may meet the requirements of Section R315-264-145 by obtaining a written guarantee. The guarantor shall be the direct or higher-tier parent corporation of the owner or operator, a firm whose parent corporation is also the parent corporation of the owner or operator, or a firm with a "substantial business relationship" with the owner or operator. The guarantor shall meet the requirements for owners or operators in Subsections R315-264-145(f)(1) through (9) and shall comply with the terms of the guarantee. The wording of the guarantee shall be identical to the wording specified in

Subsection R315-264-151(h). A certified copy of the guarantee shall accompany the items sent to the Director as specified in Subsection R315-264-145(f)(3). One of these items shall be the letter from the guarantor's chief financial officer. If the guarantor's parent corporation is also the parent corporation of the owner or operator, the letter shall describe the value received in consideration of the guarantee. If the guarantor is a firm with a "substantial business relationship" with the owner or operator, this letter shall describe this "substantial business relationship" and the value received in consideration of the guarantee. The terms of the guarantee shall provide that:

(i) If the owner or operator fails to perform post-closure care of a facility covered by the corporate guarantee in accordance with the post-closure plan and other permit requirements whenever required to do so, the guarantor shall do so or establish a trust fund as specified in Subsection R315-264-145(a) in the name of the owner or operator.

(ii) The corporate guarantee shall remain in force unless the guarantor sends notice of cancellation by certified mail to the owner or operator and to the Director. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Director, as evidenced by the return receipts.

(iii) If the owner or operator fails to provide alternate financial assurance as specified in Section R315-264-145 and obtain the written approval of such alternate assurance from the Director within 90 days after receipt by both the owner or operator and the Director of a notice of cancellation of the corporate guarantee from the guarantor, the guarantor shall provide such alternate financial assurance in the name of the owner or operator.

(g) Use of multiple financial mechanisms. An owner or operator may satisfy the requirements of Section R315-264-145 by establishing more than one financial mechanism per facility. These mechanisms are limited to trust funds, surety bonds guaranteeing payment into a trust fund, letters of credit, and insurance. The mechanisms shall be as specified in Subsections R315-264-145(a), (b), (d), and (e), respectively, except that it is the combination of mechanisms, rather than the single mechanism, which shall provide financial assurance for an amount at least equal to the current post-closure cost estimate. If an owner or operator uses a trust fund in combination with a surety bond or a letter of credit, he may use the trust fund as the standby trust fund for the other mechanisms. A single standby trust fund may be established for two or more mechanisms. The Director may use any or all of the mechanisms to provide for post-closure care of the facility.

(h) Use of a financial mechanism for multiple facilities. An owner or operator may use a financial assurance mechanism specified in Section R315-264-145 to meet the requirements of Section R315-264-145 for more than one facility. Evidence of financial assurance submitted to the Director shall include a list showing, for each facility, the EPA Identification Number, name, address, and the amount of funds for post-closure care assured by the mechanism. If the facilities covered by the mechanism are in more than one State, identical evidence of financial assurance shall be submitted to and maintained with the State Agency regulating hazardous waste in states other than Utah or with the appropriate Regional Administrator if the facility is located in an unauthorized State. The amount of funds available through the mechanism shall be no less than the sum of funds that would be available if a separate mechanism had been established and maintained for each facility. In directing funds available through the mechanism for post-closure care of any of the facilities covered by the mechanism, the Director may direct only the amount of funds designated for that facility, unless the owner or operator agrees to the use of additional funds available under the mechanism.

(i) Release of the owner or operator from the requirements

of Section R315-264-145. Within 60 days after receiving certifications from the owner or operator and a qualified Professional Engineer that the post-closure care period has been completed for a hazardous waste disposal unit in accordance with the approved plan, the Director shall notify the owner or operator that he is no longer required to maintain financial assurance for post-closure of that unit, unless the Director has reason to believe that post-closure care has not been in accordance with the approved post-closure plan. The Director shall provide the owner or operator a detailed written statement of any such reason to believe that post-closure care has not been in accordance with the approved post-closure plan.

R315-264-146. Use of a Mechanism for Financial Assurance of Both Closure and Post-Closure Care.

An owner or operator may satisfy the requirements for financial assurance for both closure and post-closure care for one or more facilities by using a trust fund, surety bond, letter of credit, insurance, financial test, or corporate guarantee that meets the specifications for the mechanism in both Sections R315-264-143 and 145. The amount of funds available through the mechanism shall be no less than the sum of funds that would be available if a separate mechanism had been established and maintained for financial assurance of closure and of post-closure care.

R315-264-147. Liability Requirements.

(a) Coverage for sudden accidental occurrences. An owner or operator of a hazardous waste treatment, storage, or disposal facility, or a group of such facilities, shall demonstrate financial responsibility for bodily injury and property damage to third parties caused by sudden accidental occurrences arising from operations of the facility or group of facilities. The owner or operator shall have and maintain liability coverage for sudden accidental occurrences in the amount of at least \$1 million per occurrence with an annual aggregate of at least \$2 million, exclusive of legal defense costs. This liability coverage may be demonstrated as specified in Subsections R315-264-147(a)(1), (2), (3), (4), (5), or (6):

(1) An owner or operator may demonstrate the required liability coverage by having liability insurance as specified in Subsection R315-264-147(a).

(i) Each insurance policy shall be amended by attachment of the Hazardous Waste Facility Liability Endorsement or evidenced by a Certificate of Liability Insurance. The wording of the endorsement shall be identical to the wording specified in Subsection R315-264-151(i). The wording of the certificate of insurance shall be identical to the wording specified in Subsection R315-264-151(j). The owner or operator shall submit a signed duplicate original of the endorsement or the certificate of insurance to the Director. If requested by a Director, the owner or operator shall provide a signed duplicate original of the insurance policy. An owner or operator of a new facility shall submit the signed duplicate original of the Hazardous Waste Facility Liability Endorsement or the Certificate of Liability Insurance to the Director at least 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal. The insurance shall be effective before this initial receipt of hazardous waste.

(ii) Each insurance policy shall be issued by an insurer which, at a minimum, is licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States.

(2) An owner or operator may meet the requirements Section R315-264-146 by passing a financial test or using the guarantee for liability coverage as specified in Subsections R315-264-147(f) and (g).

(3) An owner or operator may meet the requirements of Section R315-264-147 by obtaining a letter of credit for liability

coverage as specified in Subsection R315-264-147(h).

(4) An owner or operator may meet the requirements Section R315-264-146 by obtaining a surety bond for liability coverage as specified in Subsection R315-264-147(i).

(5) An owner or operator may meet the requirements Section R315-264-146 by obtaining a trust fund for liability coverage as specified in Subsection R315-264-147(j).

(6) An owner or operator may demonstrate the required liability coverage through the use of combinations of insurance, financial test, guarantee, letter of credit, surety bond, and trust fund, except that the owner or operator may not combine a financial test covering part of the liability coverage requirement with a guarantee unless the financial statement of the owner or operator is not consolidated with the financial statement of the guarantor. The amounts of coverage demonstrated shall total at least the minimum amounts required by Section R315-264-147. If the owner or operator demonstrates the required coverage through the use of a combination of financial assurances under Subsection R315-264-147(a), the owner or operator shall specify at least one such assurance as "primary" coverage and shall specify other assurance as "excess" coverage.

(7) An owner or operator shall notify the Director in writing within 30 days whenever:

(i) A claim results in a reduction in the amount of financial assurance for liability coverage provided by a financial instrument authorized in Subsections R315-264-147(a)(1) through (a)(6); or

(ii) A Certification of Valid Claim for bodily injury or property damages caused by a sudden or non-sudden accidental occurrence arising from the operation of a hazardous waste treatment, storage, or disposal facility is entered between the owner or operator and third-party claimant for liability coverage under Subsections R315-264-147(a)(1) through (a)(6); or

(iii) A final court order establishing a judgment for bodily injury or property damage caused by a sudden or non-sudden accidental occurrence arising from the operation of a hazardous waste treatment, storage, or disposal facility is issued against the owner or operator or an instrument that is providing financial assurance for liability coverage under Subsections R315-264-147(a)(1) through (a)(6).

(b) Coverage for nonsudden accidental occurrences. An owner or operator of a surface impoundment, landfill, land treatment facility, or disposal miscellaneous unit that is used to manage hazardous waste, or a group of such facilities, shall demonstrate financial responsibility for bodily injury and property damage to third parties caused by nonsudden accidental occurrences arising from operations of the facility or group of facilities. The owner or operator shall have and maintain liability coverage for nonsudden accidental occurrences in the amount of at least \$3 million per occurrence with an annual aggregate of at least \$6 million, exclusive of legal defense costs. An owner or operator who shall meet the requirements Section R315-264-147 may combine the required per-occurrence coverage levels for sudden and nonsudden accidental occurrences into a single per-occurrence level, and combine the required annual aggregate coverage levels for sudden and nonsudden accidental occurrences into a single annual aggregate level. Owners or operators who combine coverage levels for sudden and nonsudden accidental occurrences shall maintain liability coverage in the amount of at least \$4 million per occurrence and \$8 million annual aggregate. This liability coverage may be demonstrated as specified in Subsections R315-264-147(b)(1), (2), (3), (4), (5), or (6):

(1) An owner or operator may demonstrate the required liability coverage by having liability insurance as specified in Subsection R315-264-147(b).

(i) Each insurance policy shall be amended by attachment of the Hazardous Waste Facility Liability Endorsement or

evidenced by a Certificate of Liability Insurance. The wording of the endorsement shall be identical to the wording specified in Subsection R315-264-151(i). The wording of the certificate of insurance shall be identical to the wording specified in Subsection R315-264-151(j). The owner or operator shall submit a signed duplicate original of the endorsement or the certificate of insurance to the Director. If requested by a Director, the owner or operator shall provide a signed duplicate original of the insurance policy. An owner or operator of a new facility shall submit the signed duplicate original of the Hazardous Waste Facility Liability Endorsement or the Certificate of Liability Insurance to the Director at least 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal. The insurance shall be effective before this initial receipt of hazardous waste.

(ii) Each insurance policy shall be issued by an insurer which, at a minimum, is licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States.

(2) An owner or operator may meet the requirements Section R315-264-147 by passing a financial test or using the guarantee for liability coverage as specified in Subsections R315-264-147(f) and (g).

(3) An owner or operator may meet the requirements of Section R315-264-147 by obtaining a letter of credit for liability coverage as specified in Subsection R315-264-147(h).

(4) An owner or operator may meet the requirements of Section R315-264-147 by obtaining a surety bond for liability coverage as specified in Subsection R315-264-147(i).

(5) An owner or operator may meet the requirements of Section R315-264-147 by obtaining a trust fund for liability coverage as specified in Subsection R315-264-147(j).

(6) An owner or operator may demonstrate the required liability coverage through the use of combinations of insurance, financial test, guarantee, letter of credit, surety bond, and trust fund, except that the owner or operator may not combine a financial test covering part of the liability coverage requirement with a guarantee unless the financial statement of the owner or operator is not consolidated with the financial statement of the guarantor. The amounts of coverage demonstrated shall total at least the minimum amount required by Section R315-264-147. If the owner or operator demonstrates the required coverage through the use of a combination of financial assurances under Subsection R315-264-147(b), the owner or operator shall specify at least one such assurance as "primary" coverage and shall specify other assurance as "excess" coverage.

(7) An owner or operator shall notify the Director in writing within 30 days whenever:

(i) A Claim results in a reduction in the amount of financial assurance for liability coverage provided by a financial instrument authorized in Subsections R315-264-147(b)(1) through (b)(6); or

(ii) A Certification of Valid Claim for bodily injury or property damages caused by a sudden or non-sudden accidental occurrence arising from the operation of a hazardous waste treatment, storage, or disposal facility is entered between the owner or operator and third-party claimant for liability coverage under Subsections R315-264-147(b)(1) through (b)(6); or

(iii) A final court order establishing a judgment for bodily injury or property damage caused by a sudden or non-sudden accidental occurrence arising from the operation of a hazardous waste treatment, storage, or disposal facility is issued against the owner or operator or an instrument that is providing financial assurance for liability coverage under Subsections R315-264-147(b)(1) through (b)(6).

(c) Request for variance. If an owner or operator can demonstrate to the satisfaction of the Director that the levels of financial responsibility required by Subsection R315-264-147(a) or (b) are not consistent with the degree and duration of risk

associated with treatment, storage, or disposal at the facility or group of facilities, the owner or operator may obtain a variance from the Director. The request for a variance shall be submitted to the Director as part of the application under Subsection R315-270-14 for a facility that does not have a permit, or pursuant to the procedures for permit modification under Subsection R315-124-5 for a facility that has a permit. If granted, the variance shall take the form of an adjusted level of required liability coverage, such level to be based on the Director's assessment of the degree and duration of risk associated with the ownership or operation of the facility or group of facilities. The Director may require an owner or operator who requests a variance to provide such technical and engineering information as is deemed necessary by the Director to determine a level of financial responsibility other than that required by Subsection R315-264-147(a) or (b). Any request for a variance for a permitted facility shall be treated as a request for a permit modification under Subsections R315-270-41(a)(5) and R315-124-5.

(d) Adjustments by the Director. If the Director determines that the levels of financial responsibility required by Subsection R315-264-147(a) or (b) are not consistent with the degree and duration of risk associated with treatment, storage, or disposal at the facility or group of facilities, the Director may adjust the level of financial responsibility required under Subsection R315-264-147(a) or (b) as may be necessary to protect human health and the environment. This adjusted level shall be based on the Director's assessment of the degree and duration of risk associated with the ownership or operation of the facility or group of facilities. In addition, if the Director determines that there is a significant risk to human health and the environment from nonsudden accidental occurrences resulting from the operations of a facility that is not a surface impoundment, landfill, or land treatment facility, he may require that an owner or operator of the facility comply with Subsection R315-264-147(b). An owner or operator shall furnish to the Director, within a reasonable time, any information which the Director requests to determine whether cause exists for such adjustments of level or type of coverage. Any adjustment of the level or type of coverage for a facility that has a permit shall be treated as a permit modification under Subsections R315-270-41(a)(5) and Section R315-124-5.

(e) Period of coverage. Within 60 days after receiving certifications from the owner or operator and a qualified Professional Engineer that final closure has been completed in accordance with the approved closure plan, the Director shall notify the owner or operator in writing that he is no longer required by Section R315-264-147 to maintain liability coverage for that facility, unless the Director has reason to believe that closure has not been in accordance with the approved closure plan.

(f) Financial test for liability coverage.

(1) An owner or operator may satisfy the requirements of Section R315-264-147 by demonstrating that he passes a financial test as specified in Subsection R315-264-147(f). To pass this test the owner or operator shall meet the criteria of Subsection R315-264-147(f)(1)(i) or (ii):

(i) The owner or operator shall have:

(A) Net working capital and tangible net worth each at least six times the amount of liability coverage to be demonstrated by this test; and

(B) Tangible net worth of at least \$10 million; and

(C) Assets in the United States amounting to either:

(I) At least 90 percent of his total assets; or

(II) at least six times the amount of liability coverage to be demonstrated by this test.

(ii) The owner or operator shall have:

(A) A current rating for his most recent bond issuance of AAA, AA, A, or BBB as issued by Standard and Poor's, or Aaa,

Aa, A, or Baa as issued by Moody's; and

(B) Tangible net worth of at least \$10 million; and

(C) Tangible net worth at least six times the amount of liability coverage to be demonstrated by this test; and

(D) Assets in the United States amounting to either:

(I) At least 90 percent of his total assets; or

(II) at least six times the amount of liability coverage to be demonstrated by this test.

(2) The phrase "amount of liability coverage" as used in Subsection R315-264-147(f)(1) refers to the annual aggregate amounts for which coverage is required under Section R315-264-147(a) and (b).

(3) To demonstrate that he meets this test, the owner or operator shall submit the following three items to the Director:

(i) A letter signed by the owner's or operator's chief financial officer and worded as specified in Subsection R315-264-151(g). If an owner or operator is using the financial test to demonstrate both assurance for closure or post-closure care, as specified by Subsections R315-264-143(f), 145(f); or 40 CFR 265.143(e), and 145(e), which are adopted by reference; and liability coverage, he shall submit the letter specified in Subsection R315-264-151(g) to cover both forms of financial responsibility; a separate letter as specified in Subsection R315-264-151(f) is not required.

(ii) A copy of the independent certified public accountant's report on examination of the owner's or operator's financial statements for the latest completed fiscal year.

(iii) A special report from the owner's or operator's independent certified public accountant to the owner or operator stating that:

(A) He has compared the data which the letter from the chief financial officer specifies as having been derived from the independently audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements; and

(B) In connection with that procedure, no matters came to his attention which caused him to believe that the specified data should be adjusted.

(4) An owner or operator of a new facility shall submit the items specified in Subsection R315-264-147(f)(3) to the Director at least 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal.

(5) After the initial submission of items specified in Subsection R315-264-147(f)(3), the owner or operator shall send updated information to the Director within 90 days after the close of each succeeding fiscal year. This information shall consist of all three items specified in Subsection R315-264-147(f)(3).

(6) If the owner or operator no longer meets the requirements of Subsection R315-264-147(f)(1), he shall obtain insurance, a letter of credit, a surety bond, a trust fund, or a guarantee for the entire amount of required liability coverage as specified in Section R315-264-147. Evidence of liability coverage shall be submitted to the Director within 90 days after the end of the fiscal year for which the year-end financial data show that the owner or operator no longer meets the test requirements.

(7) The Director may disallow use of this test on the basis of qualifications in the opinion expressed by the independent certified public accountant in his report on examination of the owner's or operator's financial statements, see Subsection R315-264-147(f)(3)(ii). An adverse opinion or a disclaimer of opinion shall be cause for disallowance. The Director shall evaluate other qualifications on an individual basis. The owner or operator shall provide evidence of insurance for the entire amount of required liability coverage as specified in Section R315-264-147 within 30 days after notification of disallowance.

(g) Guarantee for liability coverage.

(1) Subject to Subsection R315-264-147(g)(2), an owner

or operator may meet the requirements of Section R315-264-147 by obtaining a written guarantee, hereinafter referred to as "guarantee." The guarantor shall be the direct or higher-tier parent corporation of the owner or operator, a firm whose parent corporation is also the parent corporation of the owner or operator, or a firm with a "substantial business relationship" with the owner or operator. The guarantor shall meet the requirements for owners or operators in Section R315-264-147(f)(1) through (f)(6). The wording of the guarantee shall be identical to the wording specified in Subsection R315-264-151(h)(2). A certified copy of the guarantee shall accompany the items sent to the Director as specified in Subsection R315-264-147(f)(3). One of these items shall be the letter from the guarantor's chief financial officer. If the guarantor's parent corporation is also the parent corporation of the owner or operator, this letter shall describe the value received in consideration of the guarantee. If the guarantor is a firm with a "substantial business relationship" with the owner or operator, this letter shall describe this "substantial business relationship" and the value received in consideration of the guarantee.

(i) If the owner or operator fails to satisfy a judgment based on a determination of liability for bodily injury or property damage to third parties caused by sudden or nonsudden accidental occurrences, or both as the case may be, arising from the operation of facilities covered by this corporate guarantee, or fails to pay an amount agreed to in settlement of claims arising from or alleged to arise from such injury or damage, the guarantor shall do so up to the limits of coverage.

(ii) Reserved

(2)(i) In the case of corporations incorporated in the United States, a guarantee may be used to satisfy the requirements Section R315-264-147 only if the Attorneys General or Insurance Commissioners of the State in which the guarantor is incorporated have submitted a written statement to the Director that a guarantee executed as described in Section R315-264-147 and Subsection R315-264-151(h)(2) is a legally valid and enforceable obligation in that State.

(ii) In the case of corporations incorporated outside the United States, a guarantee may be used to satisfy the requirements Section R315-264-147 only if

(A) the non-U.S. corporation has identified a registered agent for service of process in Utah and in the State in which it has its principal place of business, and

(B) the Attorney General or Insurance Commissioner of the State in which the guarantor corporation has its principal place of business, has submitted a written statement to the Director that a guarantee executed as described in Section R315-264-147 and Subsection R315-264-151(h)(2) is a legally valid and enforceable obligation in that State.

(h) Letter of credit for liability coverage.

(1) An owner or operator may satisfy the requirements of Section R315-264-147 by obtaining an irrevocable standby letter of credit that conforms to the requirements of Subsection R315-264-147(h) and submitting a copy of the letter of credit to the Director.

(2) The financial institution issuing the letter of credit shall be an entity that has the authority to issue letters of credit and whose letter of credit operations are regulated and examined by a Federal or State agency.

(3) The wording of the letter of credit shall be identical to the wording specified in Subsection R315-264-151(k).

(4) An owner or operator who uses a letter of credit to satisfy the requirements Section R315-264-147 may also establish a standby trust fund. Under the terms of such a letter of credit, all amounts paid pursuant to a draft by the trustee of the standby trust shall be deposited by the issuing institution into the standby trust in accordance with instructions from the trustee. The trustee of the standby trust fund shall be an entity which has the authority to act as a trustee and whose trust

operations are regulated and examined by a Federal or State agency.

(5) The wording of the standby trust fund shall be identical to the wording specified in Subsection R315-264-151(n).

(i) Surety bond for liability coverage.

(1) An owner or operator may satisfy the requirements of Section R315-264-147 by obtaining a surety bond that conforms to the requirements of Subsection R315-264-147(i) and submitting a copy of the bond to the Director.

(2) The surety company issuing the bond shall be among those listed as acceptable sureties on Federal bonds in the most recent Circular 570 of the U.S. Department of the Treasury.

(3) The wording of the surety bond shall be identical to the wording specified in Subsection R315-264-151(l).

(4) A surety bond may be used to satisfy the requirements Section R315-264-147 only if the Attorneys General or Insurance Commissioners of the State in which the surety is incorporated has submitted a written statement to the Director that a surety bond executed as described in Section R315-264-147 and Subsection R315-264-151(l) is a legally valid and enforceable obligation in that State.

(j) Trust fund for liability coverage.

(1) An owner or operator may satisfy the requirements of Section R315-264-147 by establishing a trust fund that conforms to the requirements of Subsection R315-264-147(j) and submitting an originally signed duplicate of the trust agreement to the Director.

(2) The trustee shall be an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a Federal or State agency.

(3) The trust fund for liability coverage shall be funded for the full amount of the liability coverage to be provided by the trust fund before it may be relied upon to satisfy the requirements of Section R315-264-147. If at any time after the trust fund is created the amount of funds in the trust fund is reduced below the full amount of the liability coverage to be provided, the owner or operator, by the anniversary date of the establishment of the fund, shall either add sufficient funds to the trust fund to cause its value to equal the full amount of liability coverage to be provided, or obtain other financial assurance as specified in Section R315-264-147 to cover the difference. For purposes of Subsection R315-264-147(j), "the full amount of the liability coverage to be provided" means the amount of coverage for sudden and/or nonsudden occurrences required to be provided by the owner or operator by Section R315-264-147, less the amount of financial assurance for liability coverage that is being provided by other financial assurance mechanisms being used to demonstrate financial assurance by the owner or operator.

(4) The wording of the trust fund shall be identical to the wording specified in Subsection R315-264-151(m).

(k) Notwithstanding any other provision of Rule R315-264, an owner or operator using liability insurance to satisfy the requirements of Section R315-264-147 may use, until October 16, 1982, a Hazardous Waste Facility Liability Endorsement or Certificate of Liability Insurance that does not certify that the insurer is licensed to transact the business of insurance, or eligible as an excess or surplus lines insurer, in one or more States.

R315-264-148. Incapacity of Owners or Operators, Guarantors, or Financial Institutions.

(a) An owner or operator shall notify the Director by certified mail of the commencement of a voluntary or involuntary proceeding under Title 11, Bankruptcy, U.S. Code, naming the owner or operator as debtor, within 10 days after commencement of the proceeding. A guarantor of a corporate guarantee as specified in Subsections R315-264-143(f) and 145(f) shall make such a notification if he is named as debtor, as

required under the terms of the corporate guarantee, Subsection R315-264-151(h).

(b) An owner or operator who fulfills the requirements of Sections R315-264-143, 145, or 147 by obtaining a trust fund, surety bond, letter of credit, or insurance policy shall be deemed to be without the required financial assurance or liability coverage in the event of bankruptcy of the trustee or issuing institution, or a suspension or revocation of the authority of the trustee institution to act as trustee or of the institution issuing the surety bond, letter of credit, or insurance policy to issue such instruments. The owner or operator shall establish other financial assurance or liability coverage within 60 days after such an event

R315-264-151. Financial Requirements -- Wording of the Instruments.

(a)(1) A trust agreement for a trust fund, as specified in Subsection R315-264-143(a) or Subsection R315-264-145(a) or 40 CFR 265.143(a) or 265.145(a), which are adopted by reference in Section R315-265-1; shall be worded as follows, except that instructions in parentheses, (), are to be replaced with the relevant information and the parentheses deleted:

Trust Agreement

Trust Agreement, the "Agreement," entered into as of (date) by and between (name of the owner or operator), a (name of State) (insert "corporation," "partnership," "association," or "proprietorship"), the "Grantor," and (name of corporate trustee), (insert "incorporated in the State of _____" or "a national bank"), the "Trustee."

Whereas, the Utah Waste Management and Radiation Control Board has established certain regulations applicable to the Grantor, requiring that an owner or operator of a hazardous waste management facility shall provide assurance that funds will be available when needed for closure and/or post-closure care of the facility,

Whereas, the Grantor has elected to establish a trust to provide all or part of such financial assurance for the facilities identified herein,

Whereas, the Grantor, acting through its duly authorized officers, has selected the Trustee to be the trustee under this agreement, and the Trustee is willing to act as trustee,

Now, Therefore, the Grantor and the Trustee agree as follows:

Section 1. Definitions. As used in this Agreement:

(a) The term "Grantor" means the owner or operator who enters into this Agreement and any successors or assigns of the Grantor.

(b) The term "Trustee" means the Trustee who enters into this Agreement and any successor Trustee.

(c) The term "Board" means the "Waste Management and Radiation Control Board" created pursuant to Utah Code Annotated 19-1-106.

(d) The term "Director" means the Director of the Division of Waste Management and Radiation Control, his successors, designees, and any subsequent entity of the State of Utah upon whom the duties of regulation and enforcement of regulations governing hazardous waste are granted.

Section 2. Identification of Facilities and Cost Estimates. This Agreement pertains to the facilities and cost estimates identified on attached Schedule A (on Schedule A, for each facility list the EPA Identification Number, name, address, and the current closure and/or post-closure cost estimates, or portions thereof, for which financial assurance is demonstrated by this Agreement).

Section 3. Establishment of Fund. The Grantor and the Trustee hereby establish a trust fund, the "Fund," for the benefit of the Director of the Utah Division of Waste Management and Radiation Control. The Grantor and the Trustee intend that no third party have access to the Fund except as herein provided.

The Fund is established initially as consisting of the property, which is acceptable to the Trustee, described in Schedule B attached hereto. Such property and any other property subsequently transferred to the Trustee is referred to as the Fund, together with all earnings and profits thereon, less any payments or distributions made by the Trustee pursuant to this Agreement. The Fund shall be held by the Trustee, IN TRUST, as hereinafter provided. The Trustee shall not be responsible nor shall it undertake any responsibility for the amount or adequacy of, nor any duty to collect from the Grantor, any payments necessary to discharge any liabilities of the Grantor established by the Director.

Section 4. Payment for Closure and Post-Closure Care. The Trustee shall make payments from the Fund as the Director shall direct, in writing, to provide for the payment of the costs of closure and/or post-closure care of the facilities covered by this Agreement. The Trustee shall reimburse the Grantor or other persons as specified by the Director from the Fund for closure and post-closure expenditures in such amounts as the Director shall direct in writing. In addition, the Trustee shall refund to the Grantor such amounts as the Director specifies in writing. Upon refund, such funds shall no longer constitute part of the Fund as defined herein.

Section 5. Payments Comprising the Fund. Payments made to the Trustee for the Fund shall consist of cash or securities acceptable to the Trustee.

Section 6. Trustee Management. The Trustee shall invest and reinvest the principal and income of the Fund and keep the Fund invested as a single fund, without distinction between principal and income, in accordance with general investment policies and guidelines which the Grantor may communicate in writing to the Trustee from time to time, subject, however, to the provisions Section R315-264-151. In investing, reinvesting, exchanging, selling, and managing the Fund, the Trustee shall discharge his duties with respect to the trust fund solely in the interest of the beneficiary and with the care, skill, prudence, and diligence under the circumstances then prevailing which persons of prudence, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and with like aims; except that:

(i) Securities or other obligations of the Grantor, or any other owner or operator of the facilities, or any of their affiliates as defined in the Investment Company Act of 1940, as amended, 15 U.S.C. 80a-2.(a), shall not be acquired or held, unless they are securities or other obligations of the Federal or a State government;

(ii) The Trustee is authorized to invest the Fund in time or demand deposits of the Trustee, to the extent insured by an agency of the Federal or State government; and

(iii) The Trustee is authorized to hold cash awaiting investment or distribution uninvested for a reasonable time and without liability for the payment of interest thereon.

Section 7. Commingling and Investment. The Trustee is expressly authorized in its discretion:

(a) To transfer from time to time any or all of the assets of the Fund to any common, commingled, or collective trust fund created by the Trustee in which the Fund is eligible to participate, subject to all of the provisions thereof, to be commingled with the assets of other trusts participating therein; and

(b) To purchase shares in any investment company registered under the Investment Company Act of 1940, 15 U.S.C. 80a-1 et seq., including one which may be created, managed, underwritten, or to which investment advice is rendered or the shares of which are sold by the Trustee. The Trustee may vote such shares in its discretion.

Section 8. Express Powers of Trustee. Without in any way limiting the powers and discretions conferred upon the Trustee by the other provisions of this Agreement or by law, the Trustee

is expressly authorized and empowered:

(a) To sell, exchange, convey, transfer, or otherwise dispose of any property held by it, by public or private sale. No person dealing with the Trustee shall be bound to see to the application of the purchase money or to inquire into the validity or expediency of any such sale or other disposition;

(b) To make, execute, acknowledge, and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted;

(c) To register any securities held in the Fund in its own name or in the name of a nominee and to hold any security in bearer form or in book entry, or to combine certificates representing such securities with certificates of the same issue held by the Trustee in other fiduciary capacities, or to deposit or arrange for the deposit of such securities in a qualified central depository even though, when so deposited, such securities may be merged and held in bulk in the name of the nominee of such depository with other securities deposited therein by another person, or to deposit or arrange for the deposit of any securities issued by the United States Government, or any agency or instrumentality thereof, with a Federal Reserve bank, but the books and records of the Trustee shall at all times show that all such securities are part of the Fund;

(d) To deposit any cash in the Fund in interest-bearing accounts maintained or savings certificates issued by the Trustee, in its separate corporate capacity, or in any other banking institution affiliated with the Trustee, to the extent insured by an agency of the Federal or State government; and

(e) To compromise or otherwise adjust all claims in favor of or against the Fund.

Section 9. Taxes and Expenses. All taxes of any kind that may be assessed or levied against or in respect of the Fund and all brokerage commissions incurred by the Fund shall be paid from the Fund. All other expenses incurred by the Trustee in connection with the administration of this Trust, including fees for legal services rendered to the Trustee, the compensation of the Trustee to the extent not paid directly by the Grantor, and all other proper charges and disbursements of the Trustee shall be paid from the Fund.

Section 10. Annual Valuation. The Trustee shall annually, at least 30 days prior to the anniversary date of establishment of the Fund, furnish to the Grantor and to the appropriate Director a statement confirming the value of the Trust. Any securities in the Fund shall be valued at market value as of no more than 60 days prior to the anniversary date of establishment of the Fund. The failure of the Grantor to object in writing to the Trustee within 90 days after the statement has been furnished to the Grantor and the Director shall constitute a conclusively binding assent by the Grantor, barring the Grantor from asserting any claim or liability against the Trustee with respect to matters disclosed in the statement.

Section 11. Advice of Counsel. The Trustee may from time to time consult with counsel, who may be counsel to the Grantor, with respect to any question arising as to the construction of this Agreement or any action to be taken hereunder. The Trustee shall be fully protected, to the extent permitted by law, in acting upon the advice of counsel.

Section 12. Trustee Compensation. The Trustee shall be entitled to reasonable compensation for its services as agreed upon in writing from time to time with the Grantor.

Section 13. Successor Trustee. The Trustee may resign or the Grantor may replace the Trustee, but such resignation or replacement shall not be effective until the Grantor has appointed a successor trustee and this successor accepts the appointment. The successor trustee shall have the same powers and duties as those conferred upon the Trustee hereunder. Upon the successor trustee's acceptance of the appointment, the Trustee shall assign, transfer, and pay over to the successor

trustee the funds and properties then constituting the Fund. If for any reason the Grantor cannot or does not act in the event of the resignation of the Trustee, the Trustee may apply to a court of competent jurisdiction for the appointment of a successor trustee or for instructions. The successor trustee shall specify the date on which it assumes administration of the trust in a writing sent to the Grantor, the Director, and the present Trustee by certified mail 10 days before such change becomes effective. Any expenses incurred by the Trustee as a result of any of the acts contemplated by this Section shall be paid as provided in Section 9.

Section 14. Instructions to the Trustee. All orders, requests, and instructions by the Grantor to the Trustee shall be in writing, signed by such persons as are designated in the attached Exhibit A or such other designees as the Grantor may designate by amendment to Exhibit A. The Trustee shall be fully protected in acting without inquiry in accordance with the Grantor's orders, requests, and instructions. All orders, requests, and instructions by the Director to the Trustee shall be in writing, signed by the Director, and the Trustee shall act and shall be fully protected in acting in accordance with such orders, requests, and instructions. The Trustee shall have the right to assume, in the absence of written notice to the contrary, that no event constituting a change or a termination of the authority of any person to act on behalf of the Grantor or EPA hereunder has occurred. The Trustee shall have no duty to act in the absence of such orders, requests, and instructions from the Grantor and/or the Director, except as provided for herein.

Section 15. Notice of Nonpayment. The Trustee shall notify the Grantor and the Director and the appropriate Regional Administrator(s), by certified mail within 10 days following the expiration of the 30-day period after the anniversary of the establishment of the Trust, if no payment is received from the Grantor during that period. After the pay-in period is completed, the Trustee shall not be required to send a notice of nonpayment.

Section 16. Amendment of Agreement. This Agreement may be amended by an instrument in writing executed by the Grantor, the Trustee, and the Director, or by the Trustee and the Director if the Grantor ceases to exist.

Section 17. Irrevocability and Termination. Subject to the right of the parties to amend this Agreement as provided in Section 16, this Trust shall be irrevocable and shall continue until terminated at the written agreement of the Grantor, the Trustee, and the Director, or by the Trustee and the Director, if the Grantor ceases to exist. Upon termination of the Trust, all remaining trust property, less final trust administration expenses, shall be delivered to the Grantor.

Section 18. Immunity and Indemnification. The Trustee shall not incur personal liability of any nature in connection with any act or omission, made in good faith, in the administration of this Trust, or in carrying out any directions by the Grantor or the Director issued in accordance with this Agreement. The Trustee shall be indemnified and saved harmless by the Grantor or from the Trust Fund, or both, from and against any personal liability to which the Trustee may be subjected by reason of any act or conduct in its official capacity, including all expenses reasonably incurred in its defense in the event the Grantor fails to provide such defense.

Section 19. Choice of Law. This Agreement shall be administered, construed, and enforced according to the laws of the State of Utah.

Section 20. Interpretation. As used in this Agreement, words in the singular include the plural and words in the plural include the singular. The descriptive headings for each Section of this Agreement shall not affect the interpretation or the legal efficacy of this Agreement.

In Witness Whereof the parties have caused this Agreement to be executed by their respective officers duly authorized and

their corporate seals to be hereunto affixed and attested as of the date first above written: The parties below certify that the wording of this Agreement is identical to the wording specified in Subsection R315-264-151(a)(1) as such regulations were constituted on the date first above written.

(Signature of Grantor)

(Title)

Attest:

(Title)

(Seal)

(Signature of Trustee)

Attest:

(Title)

(Seal)

(2) The following is an example of the certification of acknowledgment which shall accompany the trust agreement for a trust fund as specified in Subsections R315-264-143(a) and 145(a) or 40 CFR 265.143(a) or 145(a), which is adopted by reference. State requirements may differ on the proper content of this acknowledgment.

State of

County of

On this (date), before me personally came (owner or operator) to me known, who, being by me duly sworn, did depose and say that she/he resides at (address), that she/he is (title) of (corporation), the corporation described in and which executed the above instrument; that she/he knows the seal of said corporation; that the seal affixed to such instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation, and that she/he signed her/his name thereto by like order.

(Signature of Notary Public)

(b) A surety bond guaranteeing payment into a trust fund, as specified in Subsection R315-264-143(b) or 145(b) or 40 CFR 265.143(b) or 145(b), which are adopted by reference, shall be worded as follows, except that instructions in parentheses, (), are to be replaced with the relevant information and the parentheses deleted:

Financial Guarantee Bond

Date bond executed:

Effective date:

Principal: (legal name and business address of owner or operator)

Type of Organization: (insert "individual," "joint venture," "partnership," or "corporation")

State of incorporation:

Surety(ies): (name(s) and business address(es))

EPA Identification Number, name, address and closure and/or post-closure amount(s) for each facility guaranteed by this bond (indicate closure and post-closure amounts separately):

Total penal sum of bond: \$

Surety's bond number:

Know All Persons By These Presents, That we, the Principal and Surety(ies) hereto are firmly bound to the Director of the Utah Division of Waste Management and Radiation Control (hereinafter called Director), in the above penal sum for the payment of which we bind ourselves, our heirs, executors, administrators, successors, and assigns jointly and severally; provided that, where the Surety(ies) are corporations acting as co-sureties, we, the Sureties, bind ourselves in such sum "jointly and severally" only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each Surety binds itself, jointly and severally with the Principal, for the payment of such sum only as is set forth opposite the name of such Surety, but if no limit of liability is indicated, the limit of liability shall be the full amount of the penal sum.

Whereas said Principal is required, under the Utah Solid and Hazardous Waste Act (the Act), to have a permit or interim

status in order to own or operate each hazardous waste management facility identified above, and

Whereas said Principal is required to provide financial assurance for closure, or closure and post-closure care, as a condition of the permit or interim status, and

Whereas said Principal shall establish a standby trust fund as is required when a surety bond is used to provide such financial assurance;

Now, Therefore, the conditions of the obligation are such that if the Principal shall faithfully, before the beginning of final closure of each facility identified above, fund the standby trust fund in the amount(s) identified above for the facility,

Or, if the Principal shall fund the standby trust fund in such amount(s) within 15 days after a final order to begin closure is issued by an the Director or a U.S. district court or other court of competent jurisdiction,

Or, if the Principal shall provide alternate financial assurance, as specified in Sections R315-264-140 through 148 or 40 CFR 265.140 through 148, which are adopted by reference; as applicable, and obtain the Director's written approval of such assurance, within 90 days after the date notice of cancellation is received by both the Principal and the Director from the Surety(ies), then this obligation shall be null and void; otherwise it is to remain in full force and effect.

The Surety(ies) shall become liable on this bond obligation only when the Principal has failed to fulfill the conditions described above. Upon notification by an the Director that the Principal has failed to perform as guaranteed by this bond, the Surety(ies) shall place funds in the amount guaranteed for the facility(ies) into the standby trust fund as directed by the Director.

The liability of the Surety(ies) shall not be discharged by any payment or succession of payments hereunder, unless and until such payment or payments shall amount in the aggregate to the penal sum of the bond, but in no event shall the obligation of the Surety(ies) hereunder exceed the amount of said penal sum.

The Surety(ies) may cancel the bond by sending notice of cancellation by certified mail to the Principal and to the Director, provided, however, that cancellation shall not occur during the 120 days beginning on the date of receipt of the notice of cancellation by both the Principal and the Director, as evidenced by the return receipts.

The Principal may terminate this bond by sending written notice to the Surety(ies), provided, however, that no such notice shall become effective until the Surety(ies) receive(s) written authorization for termination of the bond by the Director.

(The following paragraph is an optional rider that may be included but is not required.)

Principal and Surety(ies) hereby agree to adjust the penal sum of the bond yearly so that it guarantees a new closure and/or post-closure amount, provided that the penal sum does not increase by more than 20 percent in any one year, and no decrease in the penal sum takes place without the written permission of the Director.

In Witness Whereof, the Principal and Surety(ies) have executed this Financial Guarantee Bond and have affixed their seals on the date set forth above.

The persons whose signatures appear below hereby certify that they are authorized to execute this surety bond on behalf of the Principal and Surety(ies) and that the wording of this surety bond is identical to the wording specified in Subsection R315-264-151(b) as such regulations were constituted on the date this bond was executed.

Principal
(Signature(s))
(Name(s))
(Title(s))
(Corporate seal)

Corporate Surety(ies)
(Name and address)

State of incorporation:

Liability limit: \$

(Signature(s))

(Name(s) and title(s))

(Corporate seal)

(For every co-surety, provide signature(s), corporate seal, and other information in the same manner as for Surety above.)

Bond premium: \$

(c) A surety bond guaranteeing performance of closure and/or post-closure care, as specified in Subsection R315-264-143(c) or 145(c), shall be worded as follows, except that the instructions in parentheses,(), are to be replaced with the relevant information and the parentheses deleted:

Performance Bond

Date bond executed:

Effective date:

Principal: (legal name and business address of owner or operator)

Type of organization: (insert "individual," "joint venture," "partnership," or "corporation")

State of incorporation:

Surety(ies): (name(s) and business address(es))

EPA Identification Number, name, address, and closure and/or post-closure amount(s) for each facility guaranteed by this bond (indicate closure and post-closure amounts separately): _____

Total penal sum of bond: \$

Surety's bond number:

Know All Persons By These Presents, That we, the Principal and Surety(ies) hereto are firmly bound to the Director of the Utah Division of Waste Management and Radiation Control (hereinafter called Director), in the above penal sum for the payment of which we bind ourselves, our heirs, executors, administrators, successors, and assigns jointly and severally; provided that, where the Surety(ies) are corporations acting as co-sureties, we, the Sureties, bind ourselves in such sum "jointly and severally" only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each Surety binds itself, jointly and severally with the Principal, for the payment of such sum only as is set forth opposite the name of such Surety, but if no limit of liability is indicated, the limit of liability shall be the full amount of the penal sum.

Whereas said Principal is required, under the Utah Solid and Hazardous Waste Act (the Act), to have a permit in order to own or operate each hazardous waste management facility identified above, and

Whereas said Principal is required to provide financial assurance for closure, or closure and post-closure care, as a condition of the permit, and

Whereas said Principal shall establish a standby trust fund as is required when a surety bond is used to provide such financial assurance;

Now, Therefore, the conditions of this obligation are such that if the Principal shall faithfully perform closure, whenever required to do so, of each facility for which this bond guarantees closure, in accordance with the closure plan and other requirements of the permit as such plan and permit may be amended, pursuant to all applicable laws, statutes, rules, and regulations, as such laws, statutes, rules, and regulations may be amended,

And, if the Principal shall faithfully perform post-closure care of each facility for which this bond guarantees post-closure care, in accordance with the post-closure plan and other requirements of the permit, as such plan and permit may be amended, pursuant to all applicable laws, statutes, rules, and regulations, as such laws, statutes, rules, and regulations may be amended,

Or, if the Principal shall provide alternate financial assurance as specified in Sections R315-264-140 through 148, and obtain the Director's written approval of such assurance, within 90 days after the date notice of cancellation is received by both the Principal and the Director from the Surety(ies), then this obligation shall be null and void, otherwise it is to remain in full force and effect.

The Surety(ies) shall become liable on this bond obligation only when the Principal has failed to fulfill the conditions described above.

Upon notification by an Director that the Principal has been found in violation of the closure requirements of Rule R315-264, for a facility for which this bond guarantees performance of closure, the Surety(ies) shall either permit closure in accordance with the closure plan and other permit requirements or place the closure amount guaranteed for the facility into the standby trust fund as directed by the Director.

Upon notification by the Director that the Principal has been found in violation of the post-closure requirements of Rule R315-264 for a facility for which this bond guarantees performance of post-closure care, the Surety(ies) shall either perform post-closure care in accordance with the post-closure plan and other permit requirements or place the post-closure amount guaranteed for the facility into the standby trust fund as directed by the Director.

Upon notification by the Director that the Principal has failed to provide alternate financial assurance as specified in Sections 315-264-140 through 148, and obtain written approval of such assurance from the Director during the 90 days following receipt by both the Principal and the Director of a notice of cancellation of the bond, the Surety(ies) shall place funds in the amount guaranteed for the facility(ies) into the standby trust fund as directed by the Director.

The surety(ies) hereby waive(s) notification of amendments to closure plans, permits, applicable laws, statutes, rules, and regulations and agrees that no such amendment shall in any way alleviate its (their) obligation on this bond.

The liability of the Surety(ies) shall not be discharged by any payment or succession of payments hereunder, unless and until such payment or payments shall amount in the aggregate to the penal sum of the bond, but in no event shall the obligation of the Surety(ies) hereunder exceed the amount of said penal sum.

The Surety(ies) may cancel the bond by sending notice of cancellation by certified mail to the owner or operator and to the Director and the appropriate Regional Administrator, provided, however, that cancellation shall not occur during the 120 days beginning on the date of receipt of the notice of cancellation by both the Principal and the Director, as evidenced by the return receipts.

The principal may terminate this bond by sending written notice to the Surety(ies), provided, however, that no such notice shall become effective until the Surety(ies) receive(s) written authorization for termination of the bond by the Director.

(The following paragraph is an optional rider that may be included but is not required.)

Principal and Surety(ies) hereby agree to adjust the penal sum of the bond yearly so that it guarantees a new closure and/or post-closure amount, provided that the penal sum does not increase by more than 20 percent in any one year, and no decrease in the penal sum takes place without the written permission of the Director.

In Witness Whereof, The Principal and Surety(ies) have executed this Performance Bond and have affixed their seals on the date set forth above.

The persons whose signatures appear below hereby certify that they are authorized to execute this surety bond on behalf of the Principal and Surety(ies) and that the wording of this surety bond is identical to the wording specified in Subsection R315-

264-151(c) as such regulation was constituted on the date this bond was executed.

Principal
(Signature(s))
(Name(s))
(Title(s))
(Corporate seal)
Corporate Surety(ies)
(Name and address)
State of incorporation:
Liability limit: \$
(Signature(s))
(Name(s) and title(s))
(Corporate seal)

(For every co-surety, provide signature(s), corporate seal, and other information in the same manner as for Surety above.)

Bond premium: \$

(d) A letter of credit, as specified in Subsection R315-264-143(d) or 145(d) or 40 CFR 265.143(c) or 145(c), which are adopted by reference, shall be worded as follows, except that instructions in parentheses, (), are to be replaced with the relevant information and the parentheses deleted:

Irrevocable Standby Letter of Credit

Director of the Division of Waste Management and Radiation Control

195 North 1950 West
P.O. Box 144880
Salt Lake City, UT 84114-4880

Dear Director: We hereby establish our Irrevocable Standby Letter of Credit No. ___ in your favor, at the request and for the account of (owner's or operator's name and address) up to the aggregate amount of (in words) U.S. dollars \$ ___, available upon presentation of

(1) your sight draft, bearing reference to this letter of credit No. ___, and

(2) your signed statement reading as follows: "I certify that the amount of the draft is payable pursuant to regulations issued under authority of the Utah Solid and Hazardous Waste Act."

This letter of credit is effective as of (date) and shall expire on (date at least 1 year later), but such expiration date shall be automatically extended for a period of (at least 1 year) on (date) and on each successive expiration date, unless, at least 120 days before the current expiration date, we notify both you and (owner's or operator's name) by certified mail that we have decided not to extend this letter of credit beyond the current expiration date. In the event you are so notified, any unused portion of the credit shall be available upon presentation of your sight draft for 120 days after the date of receipt by both the Director and (owner's or operator's name), as shown on the signed return receipts.

Whenever this letter of credit is drawn on under and in compliance with the terms of this credit, we shall duly honor such draft upon presentation to us, and we shall deposit the amount of the draft directly into the standby trust fund of (owner's or operator's name) in accordance with the Director's instructions.

We certify that the wording of this letter of credit is identical to the wording specified in Subsection R315-264-151(d) as such regulations were constituted on the date shown immediately below.

(Signature(s) and title(s) of official(s) of issuing institution)
(Date)

This credit is subject to (insert "the most recent edition of the Uniform Customs and Practice for Documentary Credits, published and copyrighted by the International Chamber of Commerce," or "the Uniform Commercial Code").

(e) A certificate of insurance, as specified in Subsection R315-264-143(e) or 145(e) or 40 CFR 265.143(d) or 145(d), which are adopted by reference, shall be worded as follows,

except that instructions in parentheses, (), are to be replaced with the relevant information and the parentheses deleted:

Certificate of Insurance for Closure or Post-Closure Care

Name and Address of Insurer

(herein called the "Insurer"):

Name and Address of Insured

(herein called the "Insured"):

Facilities Covered: (List for each facility: The EPA Identification Number, name, address, and the amount of insurance for closure and/or the amount for post-closure care (these amounts for all facilities covered shall total the face amount shown below).)

Face Amount:

Policy Number:

Effective Date:

The Insurer hereby certifies that it has issued to the Insured the policy of insurance identified above to provide financial assurance for (insert "closure" or "closure and post-closure care" or "post-closure care") for the facilities identified above. The Insurer further warrants that such policy conforms in all respects with the requirements of Subsections R315-264-143(e), or 145(e), or 40 CFR 265.143(d), and 145(d), which are adopted by reference, as applicable and as such regulations were constituted on the date shown immediately below. It is agreed that any provision of the policy inconsistent with such regulations is hereby amended to eliminate such inconsistency.

Whenever requested by the Director of the Utah Division of Waste Management and Radiation Control, the Insurer agrees to furnish to the Director a duplicate original of the policy listed above, including all endorsements thereon.

I hereby certify that the wording of this certificate is identical to the wording specified in Subsection R315-264-151(e) as such regulations were constituted on the date shown immediately below.

(Authorized signature for Insurer)

(Name of person signing)

(Title of person signing)

Signature of witness or notary:

(Date)

(f) A letter from the chief financial officer, as specified in Subsection R315-264-143(f) or 145(f), or 40 CFR 265.143(e) or 145(e), which are adopted by reference, shall be worded as follows, except that instructions in parentheses, (), are to be replaced with the relevant information and the parentheses deleted:

Letter From Chief Financial Officer
Director, Utah Division of Waste Management and Radiation Control.

195 North 1950 West

P.O. Box 144880

Salt Lake City, UT 84114-4880

I am the chief financial officer of (name and address of firm). This letter is in support of this firm's use of the financial test to demonstrate financial assurance for closure and/or post-closure costs, as specified in Sections R315-264-140 through 148 and 40 CFR 265.140 through 148, which are adopted by reference.

(Fill out the following five paragraphs regarding facilities and associated cost estimates. If your firm has no facilities that belong in a particular paragraph, write "None" in the space indicated. For each facility, include its EPA Identification Number, name, address, and current closure and/or post-closure cost estimates. Identify each cost estimate as to whether it is for closure or post-closure care).

1. This firm is the owner or operator of the following facilities for which financial assurance for closure or post-closure care is demonstrated through the financial test specified in Sections R315-264-140 through 148 and 40 CFR 265.140 through 148, which are adopted by reference. The current

closure and/or post-closure cost estimates covered by the test are shown for each facility: _____.

2. This firm guarantees, through the guarantee specified in Sections R315-264-140 through 148 and 40 CFR 265.140 through 148, which are adopted by reference, the closure or post-closure care of the following facilities owned or operated by the guaranteed party. The current cost estimates for the closure or post-closure care so guaranteed are shown for each facility: _____. The firm identified above is (insert one or more: (1) The direct or higher-tier parent corporation of the owner or operator; (2) owned by the same parent corporation as the parent corporation of the owner or operator, and receiving the following value in consideration of this guarantee ____; or (3) engaged in the following substantial business relationship with the owner or operator _____, and receiving the following value in consideration of this guarantee ____). (Attach a written description of the business relationship or a copy of the contract establishing such relationship to this letter).

3. In other jurisdictions, and states where the Director is not authorized to administer the financial requirements of R315-264-140 through 151 or 40 CFR 265.140 through 148, which are adopted by reference, this firm, as owner or operator or guarantor, is demonstrating financial assurance for the closure or post-closure care of the following facilities through the use of a test equivalent or substantially equivalent to the financial test specified in Sections R315-264-140 through 148 and 40 CFR 265.140 through 148, which are adopted by reference. The current closure and/or post-closure cost estimates covered by such a test are shown for each facility: _____.

4. This firm is the owner or operator of the following hazardous waste management facilities for which financial assurance for closure or, if a disposal facility, post-closure care, is not demonstrated either to EPA or a State through the financial test or any other financial assurance mechanism specified in Sections R315-264-140 through 148 and 40 CFR 265.140 through 148, which are adopted by reference, or equivalent or substantially equivalent State mechanisms. The current closure and/or post-closure cost estimates not covered by such financial assurance are shown for each facility: _____.

5. This firm is the owner or operator of the following UIC facilities for which financial assurance for plugging and abandonment is required under 40 CFR 144. The current closure cost estimates as required by 40 CFR 144.62 are shown for each facility: _____.

This firm (insert "is required" or "is not required") to file a Form 10K with the Securities and Exchange Commission (SEC) for the latest fiscal year.

The fiscal year of this firm ends on (month, day). The figures for the following items marked with an asterisk are derived from this firm's independently audited, year-end financial statements for the latest completed fiscal year, ended (date).

(Fill in Alternative I if the criteria of Subsection R315-264-143(f)(1)(i) or Subsection R315-264-145(f)(1)(i), or 40 CFR 265.143(e)(1)(i) or 145(e)(1)(i), which are adopted by reference, are used. Fill in Alternative II if the criteria of Subsection R315-264-143(f)(1)(ii) or 40 CFR 265.143(e)(1)(ii) or 145(e)(1)(ii) or 145(f)(1)(ii), which are adopted by reference, are used.)

Alternative I

1. Sum of current closure and post-closure cost estimate (total of all cost estimates shown in the five paragraphs above) \$ _____

*2. Total liabilities (if any portion of the closure or post-closure cost estimates is included in total liabilities, you may deduct the amount of that portion from this line and add that amount to lines 3 and 4) \$ _____

*3. Tangible net worth \$ _____

*4. Net worth \$ _____

- *5. Current assets \$ _____
- *6. Current liabilities \$ _____
- 7. Net working capital (line 5 minus line 6) \$ _____
- *8. The sum of net income plus depreciation, depletion, and amortization \$ _____
- *9. Total assets in U.S. (required only if less than 90% of firm's assets are located in the U.S.) \$ _____
- 10. Is line 3 at least \$10 million? (Yes/No) _____
- 11. Is line 3 at least 6 times line 1? (Yes/No) _____
- 12. Is line 7 at least 6 times line 1? (Yes/No) _____
- *13. Are at least 90% of firm's assets located in the U.S.? If not, complete line 14 (Yes/No) _____
- 14. Is line 9 at least 6 times line 1? (Yes/No) _____
- 15. Is line 2 divided by line 4 less than 2.0? (Yes/No) _____
- 16. Is line 8 divided by line 2 greater than 0.1? (Yes/No) _____
- _____ 17. Is line 5 divided by line 6 greater than 1.5? (Yes/No) _____

Alternative II

- 1. Sum of current closure and post-closure cost estimates (total of all cost estimates shown in the five paragraphs above) \$ _____
- 2. Current bond rating of most recent issuance of this firm and name of rating service _____
- 3. Date of issuance of bond _____
- 4. Date of maturity of bond _____
- *5. Tangible net worth (if any portion of the closure and post-closure cost estimates is included in "total liabilities" on your firm's financial statements, you may add the amount of that portion to this line) \$ _____
- *6. Total assets in U.S. (required only if less than 90% of firm's assets are located in the U.S.) \$ _____
- 7. Is line 5 at least \$10 million? (Yes/No) _____
- 8. Is line 5 at least 6 times line 1? (Yes/No) _____
- *9. Are at least 90% of firm's assets located in the U.S.? If not, complete line 10 (Yes/No) _____
- 10. Is line 6 at least 6 times line 1? (Yes/No) _____

I hereby certify that the wording of this letter is identical to the wording specified in Subsection R315-264-151(f) as such regulations were constituted on the date shown immediately below.

(Signature)
 (Name)
 (Title)
 (Date)

(g) A letter from the chief financial officer, as specified in Subsection R315-264-147(f) or 40 CFR 265.147(f), which is adopted by reference, shall be worded as follows, except that instructions in parentheses, (), are to be replaced with the relevant information and the parentheses deleted.

Letter From Chief Financial Officer
 Director, Utah Division of Waste Management and Radiation Control.
 195 North 1950 West
 P.O. Box 144880
 Salt Lake City, UT 84114-4880

I am the chief financial officer of (firm's name and address). This letter is in support of the use of the financial test to demonstrate financial responsibility for liability coverage (insert "and closure and/or post-closure care" if applicable) as specified in Sections R315-264-140 through 148 and 40 CFR 265.140 through 148, which are adopted by reference.

(Fill out the following paragraphs regarding facilities and liability coverage. If there are no facilities that belong in a particular paragraph, write "None" in the space indicated. For each facility, include its EPA Identification Number, name, and address).

The firm identified above is the owner or operator of the following facilities for which liability coverage for (insert

"sudden" or "nonsudden" or "both sudden and nonsudden") accidental occurrences is being demonstrated through the financial test specified in Sections R315-264-140 through 148 and 40 CFR 265.140 through 148, which are adopted by reference:

The firm identified above guarantees, through the guarantee specified in Sections R315-264-140 through 148 and 40 CFR 265.140 through 148, which are adopted by reference, liability coverage for (insert "sudden" or "nonsudden" or "both sudden and nonsudden") accidental occurrences at the following facilities owned or operated by the following: _____. The firm identified above is (insert one or more: (1) The direct or higher-tier parent corporation of the owner or operator; (2) owned by the same parent corporation as the parent corporation of the owner or operator, and receiving the following value in consideration of this guarantee _____.; or (3) engaged in the following substantial business relationship with the owner or operator _____, and receiving the following value in consideration of this guarantee _____.). (Attach a written description of the business relationship or a copy of the contract establishing such relationship to this letter.)

(If you are using the financial test to demonstrate coverage of both liability and closure and post-closure care, fill in the following five paragraphs regarding facilities and associated closure and post-closure cost estimates. If there are no facilities that belong in a particular paragraph, write "None" in the space indicated. For each facility, include its EPA identification number, name, address, and current closure and/or post-closure cost estimates. Identify each cost estimate as to whether it is for closure or post-closure care.)

1. The firm identified above owns or operates the following facilities for which financial assurance for closure or post-closure care or liability coverage is demonstrated through the financial test specified in Sections R315-264-140 through 148 and 40 CFR 265.140 through 148, which are adopted by reference. The current closure and/or post-closure cost estimate covered by the test are shown for each facility: _____.

2. The firm identified above guarantees, through the guarantee specified in Sections R315-264-140 through 148 and 40 CFR 265.140 through 148, which are adopted by reference, the closure and post-closure care or liability coverage of the following facilities owned or operated by the guaranteed party. The current cost estimates for closure or post-closure care so guaranteed are shown for each facility: _____.

3. In other jurisdictions, and states where the Director is not authorized to administer the financial requirements of R315-264-140 through 151 or 40 CFR 265.140 through 148, which are adopted by reference, this firm is demonstrating financial assurance for the closure or post-closure care of the following facilities through the use of a test equivalent or substantially equivalent to the financial test specified in Sections R315-264-140 through 148 and 40 CFR 265.140 through 148, which are adopted by reference. The current closure or post-closure cost estimates covered by such a test are shown for each facility: _____.

4. The firm identified above owns or operates the following hazardous waste management facilities for which financial assurance for closure or, if a disposal facility, post-closure care, is not demonstrated either to EPA or a State through the financial test or any other financial assurance mechanisms specified in Sections R315-264-140 through 148 and 40 CFR 265.140 through 148, which are adopted by reference, or equivalent or substantially equivalent State mechanisms. The current closure and/or post-closure cost estimates not covered by such financial assurance are shown for each facility: _____.

5. This firm is the owner or operator or guarantor of the following UIC facilities for which financial assurance for plugging and abandonment is required under 40 CFR 144 and

is assured through a financial test. The current closure cost estimates as required by 40 CFR 144.62 are shown for each facility:_____.

This firm (insert "is required" or "is not required") to file a Form 10K with the Securities and Exchange Commission (SEC) for the latest fiscal year.

The fiscal year of this firm ends on (month, day). The figures for the following items marked with an asterisk are derived from this firm's independently audited, year-end financial statements for the latest completed fiscal year, ended (date).

Part A. Liability Coverage for Accidental Occurrences

(Fill in Alternative I if the criteria of Subsection R315-264-147(f)(1)(i) or 40 CFR 265.147(f)(1)(i), which is adopted by reference, are used. Fill in Alternative II if the criteria of Subsection R315-264-147(f)(1)(ii) or 40 CFR 265.147(f)(1)(ii), which is adopted by reference, are used.)

Alternative I

1. Amount of annual aggregate liability coverage to be demonstrated \$_____.
- *2. Current assets \$_____.
- *3. Current liabilities \$_____.
4. Net working capital (line 2 minus line 3) \$_____.
- *5. Tangible net worth \$_____.
- *6. If less than 90% of assets are located in the U.S., give total U.S. assets \$_____.
7. Is line 5 at least \$10 million? (Yes/No) _____.
8. Is line 4 at least 6 times line 1? (Yes/No) _____.
9. Is line 5 at least 6 times line 1? (Yes/No) _____.
- *10. Are at least 90% of assets located in the U.S.? (Yes/No) _____. If not, complete line 11.
11. Is line 6 at least 6 times line 1? (Yes/No) _____.

Alternative II

1. Amount of annual aggregate liability coverage to be demonstrated \$_____.
2. Current bond rating of most recent issuance and name of rating service _____.
3. Date of issuance of bond _____.
4. Date of maturity of bond _____.
- *5. Tangible net worth \$_____.
- *6. Total assets in U.S. (required only if less than 90% of assets are located in the U.S.) \$_____.
7. Is line 5 at least \$10 million? (Yes/No) _____.
8. Is line 5 at least 6 times line 1? _____.
9. Are at least 90% of assets located in the U.S.? If not, complete line 10. (Yes/No) _____.
10. Is line 6 at least 6 times line 1? _____.

(Fill in part B if you are using the financial test to demonstrate assurance of both liability coverage and closure or post-closure care.)

Part B. Closure or Post-Closure Care and Liability Coverage

(Fill in Alternative I if the criteria of Subsection R315-264-143(f)(1)(i) or Subsection R315-264-145(f)(1)(i) and of Subsection R315-264-147(f)(1)(i) are used or if the criteria of 40 CFR 265.143(e)(1)(i) or 145(e)(1)(i), which are adopted by reference, and of 40 CFR 265.147(f)(1)(i), which is adopted by reference, are used. Fill in Alternative II if the criteria of Subsection R315-264-143(f)(1)(ii) or Subsection R315-264-145(f)(1)(ii) and of Subsection R315-264-147(f)(1)(ii) are used or if the criteria of 40 CFR 265.143(e)(1)(i) or 145(e)(1)(i), which are adopted by reference, and of 40 CFR 265.147(f)(1)(ii), which is adopted by reference, are used.)

Alternative I

1. Sum of current closure and post-closure cost estimates (total of all cost estimates listed above) \$_____.
2. Amount of annual aggregate liability coverage to be demonstrated \$_____.
3. Sum of lines 1 and 2 \$_____.

*4. Total liabilities (if any portion of your closure or post-closure cost estimates is included in your total liabilities, you may deduct that portion from this line and add that amount to lines 5 and 6) \$_____.

- *5. Tangible net worth \$_____.
- *6. Net worth \$_____.
- *7. Current assets \$_____.
- *8. Current liabilities \$_____.
9. Net working capital (line 7 minus line 8) \$_____.
- *10. The sum of net income plus depreciation, depletion, and amortization \$_____.

*11. Total assets in U.S. (required only if less than 90% of assets are located in the U.S.) \$_____.

12. Is line 5 at least \$10 million? (Yes/No)
13. Is line 5 at least 6 times line 3? (Yes/No)
14. Is line 9 at least 6 times line 3? (Yes/No)
- *15. Are at least 90% of assets located in the U.S.? (Yes/No) If not, complete line 16.
16. Is line 11 at least 6 times line 3? (Yes/No)
17. Is line 4 divided by line 6 less than 2.0? (Yes/No)
18. Is line 10 divided by line 4 greater than 0.1? (Yes/No)
19. Is line 7 divided by line 8 greater than 1.5? (Yes/No)

Alternative II

1. Sum of current closure and post-closure cost estimates (total of all cost estimates listed above) \$_____.
2. Amount of annual aggregate liability coverage to be demonstrated \$_____.
3. Sum of lines 1 and 2 \$_____.
4. Current bond rating of most recent issuance and name of rating service _____.
5. Date of issuance of bond _____.
6. Date of maturity of bond _____.

*7. Tangible net worth (if any portion of the closure or post-closure cost estimates is included in "total liabilities" on your financial statements you may add that portion to this line) \$_____.

*8. Total assets in the U.S. (required only if less than 90% of assets are located in the U.S.) \$_____.

9. Is line 7 at least \$10 million? (Yes/No)
10. Is line 7 at least 6 times line 3? (Yes/No)
- *11. Are at least 90% of assets located in the U.S.? (Yes/No) If not complete line 12.
12. Is line 8 at least 6 times line 3? (Yes/No)

I hereby certify that the wording of this letter is identical to the wording specified in Subsection R315-264-151(g) as such regulations were constituted on the date shown immediately below.

(Signature)
(Name)
(Title)
(Date)

(h)(1) A corporate guarantee, as specified in Subsection R315-264-143(f) or 145(f), or 40 CFR 265.143(e) or 145(e), which are adopted by reference, shall be worded as follows, except that instructions in parentheses, (), are to be replaced with the relevant information and the parentheses deleted:

Corporate Guarantee for Closure or Post-Closure Care
Guarantee made this (date) by (name of guaranteeing entity), a business corporation organized under the laws of the State of (insert name of State), herein referred to as guarantor. This guarantee is made on behalf of the (owner or operator) of (business address), which is (one of the following: "our subsidiary"; "a subsidiary of (name and address of common parent corporation), of which guarantor is a subsidiary"; or "an entity with which guarantor has a substantial business relationship, as defined in (either Subsection R315-264-141(h) or 40 CFR 265.141(h), which is adopted by reference.)" to the Director of the Utah Division of Waste Management and Radiation Control (Director).

Recitals

1. Guarantor meets or exceeds the financial test criteria and agrees to comply with the reporting requirements for guarantors as specified in Subsections R315-264-143(f) and 145(f) or 40 CFR 265.143(e) and 145(e), which are adopted by reference.

2. (Owner or operator) owns or operates the following hazardous waste management facility(ies) covered by this guarantee: (List for each facility: EPA Identification Number, name, and address. Indicate for each whether guarantee is for closure, post-closure care, or both.)

3. "Closure plans" and "post-closure plans" as used below refer to the plans maintained as required by Sections R315-264-110 through 120 and 40 CFR 265.110 through 120, which are adopted by reference, for the closure and post-closure care of facilities as identified above.

4. For value received from (owner or operator), guarantor guarantees to the Director that in the event that (owner or operator) fails to perform (insert "closure," "post-closure care" or "closure and post-closure care") of the above facility(ies) in accordance with the closure or post-closure plans and other permit or interim status requirements whenever required to do so, the guarantor shall do so or establish a trust fund as specified in Sections R315-264-140 through 148 or 40 CFR 265.140 through 148, which are adopted by reference, as applicable, in the name of (owner or operator) in the amount of the current closure or post-closure cost estimates as specified in Sections R315-264-140 through 148 or 40 CFR 265.140 through 148, which are adopted by reference.

5. Guarantor agrees that if, at the end of any fiscal year before termination of this guarantee, the guarantor fails to meet the financial test criteria, guarantor shall send within 90 days, by certified mail, notice to the Director and to (owner or operator) that he intends to provide alternate financial assurance as specified in Sections R315-264-140 through 148 or 40 CFR 265.140 through 148, which are adopted by reference, as applicable, in the name of (owner or operator). Within 120 days after the end of such fiscal year, the guarantor shall establish such financial assurance unless (owner or operator) has done so.

6. The guarantor agrees to notify the Director and the appropriate Regional Administrator by certified mail, of a voluntary or involuntary proceeding under Title 11, Bankruptcy, U.S. Code, naming guarantor as debtor, within 10 days after commencement of the proceeding.

7. Guarantor agrees that within 30 days after being notified by the Director of a determination that guarantor no longer meets the financial test criteria or that he is disallowed from continuing as a guarantor of closure or post-closure care, he shall establish alternate financial assurance as specified in Sections R315-264-140 through 148 or 40 CFR 265.140 through 148, which are adopted by reference, as applicable, in the name of (owner or operator) unless (owner or operator) has done so.

8. Guarantor agrees to remain bound under this guarantee notwithstanding any or all of the following: amendment or modification of the closure or post-closure plan, amendment or modification of the permit, the extension or reduction of the time of performance of closure or post-closure, or any other modification or alteration of an obligation of the owner or operator pursuant to Rules R315-264 or 265.

9. Guarantor agrees to remain bound under this guarantee for as long as (owner or operator) shall comply with the applicable financial assurance requirements of Sections R315-264-140 through 148 or 40 CFR 265.140 through 148, which are adopted by reference, for the above-listed facilities, except as provided in paragraph 10 of this agreement.

10. (Insert the following language if the guarantor is (a) a direct or higher-tier corporate parent, or (b) a firm whose parent corporation is also the parent corporation of the owner or

operator):

Guarantor may terminate this guarantee by sending notice by certified mail to the Director and to (owner or operator) and to the appropriate Regional Administrator, provided that this guarantee may not be terminated unless and until (the owner or operator) obtains, and the Director approves, alternate closure and/or post-closure care coverage complying with Sections R315-264-143 and/or 264-145, or 40 CFR 265.143, and/or 145, which are adopted by reference.

(Insert the following language if the guarantor is a firm qualifying as a guarantor due to its "substantial business relationship" with its owner or operator)

Guarantor may terminate this guarantee 120 days following the receipt of notification, through certified mail, by the Director and by (the owner or operator).

11. Guarantor agrees that if (owner or operator) fails to provide alternate financial assurance as specified in Sections R315-264-140 through 148 or 40 CFR 265.140 through 148, which are adopted by reference, as applicable, and obtain written approval of such assurance from the Director within 90 days after a notice of cancellation by the guarantor is received by the Director from guarantor, guarantor shall provide such alternate financial assurance in the name of (owner or operator).

12. Guarantor expressly waives notice of acceptance of this guarantee by the Director or by (owner or operator). Guarantor also expressly waives notice of amendments or modifications of the closure and/or post-closure plan and of amendments or modifications of the facility permit(s).

I hereby certify that the wording of this guarantee is identical to the wording specified in Subsection R315-264-151(h) as such regulations were constituted on the date first above written.

Effective date:

(Name of guarantor)

(Authorized signature for guarantor)

(Name of person signing)

(Title of person signing)

Signature of witness or notary:

(2) A guarantee, as specified in Subsection R315-264-147(g) or 40 CFR 265.147(g), which is adopted by reference, shall be worded as follows, except that instructions in parentheses, (), are to be replaced with the relevant information and the parentheses deleted:

Guarantee for Liability Coverage

Guarantee made this (date) by (name of guaranteeing entity), a business corporation organized under the laws of (if incorporated within the United States insert "the State of _____" and insert name of State; if incorporated outside the United States insert the name of the country in which incorporated, the principal place of business within the United States, and the name and address of the registered agent in the State of the principal place of business), herein referred to as guarantor. This guarantee is made on behalf of (owner or operator) of (business address), which is one of the following: "our subsidiary;" "a subsidiary of (name and address of common parent corporation), of which guarantor is a subsidiary;" or "an entity with which guarantor has a substantial business relationship, as defined in (either Subsection R315-264-141(h) or 40 CFR 265.141(h), which is adopted by reference).", to any and all third parties who have sustained or may sustain bodily injury or property damage caused by (sudden and/or nonsudden) accidental occurrences arising from operation of the facility(ies) covered by this guarantee.

Recitals

1. Guarantor meets or exceeds the financial test criteria and agrees to comply with the reporting requirements for guarantors as specified in Subsection R315-264-147(g) and 40 CFR 265.147(g), which is adopted by reference.

2. (Owner or operator) owns or operates the following

hazardous waste management facility(ies) covered by this guarantee: (List for each facility: EPA identification number, name, and address; and if guarantor is incorporated outside the United States list the name and address of the guarantor's registered agent in each State.) This corporate guarantee satisfies the third-party liability requirements for (insert "sudden" or "nonsudden" or "both sudden and nonsudden") accidental occurrences in above-named owner or operator facilities for coverage in the amount of (insert dollar amount) for each occurrence and (insert dollar amount) annual aggregate.

3. For value received from (owner or operator), guarantor guarantees to any and all third parties who have sustained or may sustain bodily injury or property damage caused by (sudden and/or nonsudden) accidental occurrences arising from operations of the facility(ies) covered by this guarantee that in the event that (owner or operator) fails to satisfy a judgment or award based on a determination of liability for bodily injury or property damage to third parties caused by (sudden and/or nonsudden) accidental occurrences, arising from the operation of the above-named facilities, or fails to pay an amount agreed to in settlement of a claim arising from or alleged to arise from such injury or damage, the guarantor shall satisfy such judgment(s), award(s) or settlement agreement(s) up to the limits of coverage identified above.

4. Such obligation does not apply to any of the following:

(a) Bodily injury or property damage for which (insert owner or operator) is obligated to pay damages by reason of the assumption of liability in a contract or agreement. This exclusion does not apply to liability for damages that (insert owner or operator) would be obligated to pay in the absence of the contract or agreement.

(b) Any obligation of (insert owner or operator) under a workers' compensation, disability benefits, or unemployment compensation law or any similar law.

(c) Bodily injury to:

(1) An employee of (insert owner or operator) arising from, and in the course of, employment by (insert owner or operator); or

(2) The spouse, child, parent, brother, or sister of that employee as a consequence of, or arising from, and in the course of employment by (insert owner or operator). This exclusion applies:

(A) Whether (insert owner or operator) may be liable as an employer or in any other capacity; and

(B) To any obligation to share damages with or repay another person who shall pay damages because of the injury to persons identified in paragraphs (1) and (2).

(d) Bodily injury or property damage arising out of the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle or watercraft.

(e) Property damage to:

(1) Any property owned, rented, or occupied by (insert owner or operator);

(2) Premises that are sold, given away or abandoned by (insert owner or operator) if the property damage arises out of any part of those premises;

(3) Property loaned to (insert owner or operator);

(4) Personal property in the care, custody or control of (insert owner or operator);

(5) That particular part of real property on which (insert owner or operator) or any contractors or subcontractors working directly or indirectly on behalf of (insert owner or operator) are performing operations, if the property damage arises out of these operations.

5. Guarantor agrees that if, at the end of any fiscal year before termination of this guarantee, the guarantor fails to meet the financial test criteria, guarantor shall send within 90 days, by certified mail, notice to the Director and to (owner or operator) and to the appropriate Regional Administrator that he intends to

provide alternate liability coverage as specified in Section R315-264-147 and 40 CFR 265.147, which is adopted by reference, as applicable, in the name of (owner or operator). Within 120 days after the end of such fiscal year, the guarantor shall establish such liability coverage unless (owner or operator) has done so.

6. The guarantor agrees to notify the Director and the appropriate Regional Administrator by certified mail of a voluntary or involuntary proceeding under title 11, Bankruptcy, U.S. Code, naming guarantor as debtor, within 10 days after commencement of the proceeding.

7. Guarantor agrees that within 30 days after being notified by the Director of a determination that guarantor no longer meets the financial test criteria or that he is disallowed from continuing as a guarantor, he shall establish alternate liability coverage as specified in Section R315-264-147 or 40 CFR 265.147, which is adopted by reference, in the name of (owner or operator), unless (owner or operator) has done so.

8. Guarantor reserves the right to modify this agreement to take into account amendment or modification of the liability requirements set by Section R315-264-147 and 40 CFR 265.147, which is adopted by reference, provided that such modification shall become effective only if the Director does not disapprove the modification within 30 days of receipt of notification of the modification.

9. Guarantor agrees to remain bound under this guarantee for so long as (owner or operator) shall comply with the applicable requirements of Sections R315-264-147 and 40 CFR 265.147, which is adopted by reference, for the above-listed facility(ies), except as provided in paragraph 10 of this agreement.

10. (Insert the following language if the guarantor is (a) a direct or higher-tier corporate parent, or (b) a firm whose parent corporation is also the parent corporation of the owner or operator):

Guarantor may terminate this guarantee by sending notice by certified mail to the Director and to (owner or operator) and to the appropriate Regional Administrator, provided that this guarantee may not be terminated unless and until (the owner or operator) obtains, and the Director approves, alternate liability coverage complying with Sections R315-264-147 and/or 40 CFR 265.147, which is adopted by reference.

(Insert the following language if the guarantor is a firm qualifying as a guarantor due to its "substantial business relationship" with the owner or operator):

Guarantor may terminate this guarantee 120 days following receipt of notification, through certified mail, by the Director and by (the owner or operator).

11. Guarantor hereby expressly waives notice of acceptance of this guarantee by any party.

12. Guarantor agrees that this guarantee is in addition to and does not affect any other responsibility or liability of the guarantor with respect to the covered facilities.

13. The Guarantor shall satisfy a third-party liability claim only on receipt of one of the following documents:

(a) Certification from the Principal and the third-party claimant(s) that the liability claim should be paid. The certification shall be worded as follows, except that instructions in parentheses, (), are to be replaced with the relevant information and the parentheses deleted:

Certification of Valid Claim

The undersigned, as parties (insert Principal) and (insert name and address of third-party claimant(s)), hereby certify that the claim of bodily injury and/or property damage caused by a (sudden or nonsudden) accidental occurrence arising from operating (Principal's) hazardous waste treatment, storage, or disposal facility should be paid in the amount of \$

(Signatures)

Principal

(Notary) Date
 (Signatures)
 Claimant(s)
 (Notary) Date

(b) A valid final court order establishing a judgment against the Principal for bodily injury or property damage caused by sudden or nonsudden accidental occurrences arising from the operation of the Principal's facility or group of facilities.

14. In the event of combination of this guarantee with another mechanism to meet liability requirements, this guarantee shall be considered (insert "primary" or "excess") coverage.

I hereby certify that the wording of the guarantee is identical to the wording specified in Subsection R315-264-151(h)(2) as such regulations were constituted on the date shown immediately below.

Effective date:
 (Name of guarantor)
 (Authorized signature for guarantor)
 (Name of person signing)
 (Title of person signing)
 Signature of witness or notary:

(i) A hazardous waste facility liability endorsement as required in Section R315-264-147 or 40 CFR 265.147, which is adopted by reference, shall be worded as follows, except that instructions in parentheses, (), are to be replaced with the relevant information and the parentheses deleted:

Hazardous Waste Facility Liability Endorsement

1. This endorsement certifies that the policy to which the endorsement is attached provides liability insurance covering bodily injury and property damage in connection with the insured's obligation to demonstrate financial responsibility under Sections R315-264-147 or 40 CFR 265.147, which is adopted by reference. The coverage applies at (list EPA Identification Number, name, and address for each facility) for (insert "sudden accidental occurrences," "nonsudden accidental occurrences," or "sudden and nonsudden accidental occurrences"; if coverage is for multiple facilities and the coverage is different for different facilities, indicate which facilities are insured for sudden accidental occurrences, which are insured for nonsudden accidental occurrences, and which are insured for both). The limits of liability are (insert the dollar amount of the "each occurrence" and "annual aggregate" limits of the Insurer's liability), exclusive of legal defense costs.

2. The insurance afforded with respect to such occurrences is subject to all of the terms and conditions of the policy; provided, however, that any provisions of the policy inconsistent with subsections (a) through (e) of this Paragraph 2 are hereby amended to conform with subsections (a) through (e):

(a) Bankruptcy or insolvency of the insured shall not relieve the Insurer of its obligations under the policy to which this endorsement is attached.

(b) The Insurer is liable for the payment of amounts within any deductible applicable to the policy, with a right of reimbursement by the insured for any such payment made by the Insurer. This provision does not apply with respect to that amount of any deductible for which coverage is demonstrated as specified in Subsections R315-264-147(f) or 40 CFR 265.147(f), which is adopted by reference.

(c) Whenever requested by the Director of the Utah Division of Waste Management and Radiation Control (Director), the Insurer agrees to furnish to the Director a signed duplicate original of the policy and all endorsements.

(d) Cancellation of this endorsement, whether by the Insurer, the insured, a parent corporation providing insurance coverage for its subsidiary, or by a firm having an insurable interest in and obtaining liability insurance on behalf of the owner or operator of the hazardous waste management facility, shall be effective only upon written notice and only after the

expiration of 60 days after a copy of such written notice is received by the Director and by the appropriate Regional Administrator.

(e) Any other termination of this endorsement shall be effective only upon written notice and only after the expiration of thirty (30) days after a copy of such written notice is received by the Director.

Attached to and forming part of policy No. ___ issued by (name of Insurer), herein called the Insurer, of (address of Insurer) to (name of insured) of (address) this ___ day of ___, 19___. The effective date of said policy is ___ day of ___, 19__.

I hereby certify that the wording of this endorsement is identical to the wording specified in Subsection R315-264-151(i) as such regulation was constituted on the date first above written, and that the Insurer is licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States.

(Signature of Authorized Representative of Insurer)
 (Type name)
 (Title), Authorized Representative of (name of Insurer)
 (Address of Representative)

(j) A certificate of liability insurance as required in Section R315-264-147 or 40 CFR 265.147, which is adopted by reference, shall be worded as follows, except that the instructions in parentheses, (), are to be replaced with the relevant information and the parentheses deleted:

Hazardous Waste Facility Certificate of Liability Insurance

1. (Name of Insurer), (the "Insurer"), of (address of Insurer) hereby certifies that it has issued liability insurance covering bodily injury and property damage to (name of insured), (the "insured"), of (address of insured) in connection with the insured's obligation to demonstrate financial responsibility under Sections R315-264-147 or 40 CFR 265.147, which is adopted by reference. The coverage applies at (list EPA Identification Number, name, and address for each facility) for (insert "sudden accidental occurrences," "nonsudden accidental occurrences," or "sudden and nonsudden accidental occurrences"; if coverage is for multiple facilities and the coverage is different for different facilities, indicate which facilities are insured for sudden accidental occurrences, which are insured for nonsudden accidental occurrences, and which are insured for both). The limits of liability are (insert the dollar amount of the "each occurrence" and "annual aggregate" limits of the Insurer's liability), exclusive of legal defense costs. The coverage is provided under policy number ___, issued on (date). The effective date of said policy is (date).

2. The Insurer further certifies the following with respect to the insurance described in Paragraph 1:

(a) Bankruptcy or insolvency of the insured shall not relieve the Insurer of its obligations under the policy.

(b) The Insurer is liable for the payment of amounts within any deductible applicable to the policy, with a right of reimbursement by the insured for any such payment made by the Insurer. This provision does not apply with respect to that amount of any deductible for which coverage is demonstrated as specified in Subsection R315-264-147(f) or 40 CFR 265.147(f), which is adopted by reference.

(c) Whenever requested by the Director of the Utah Division of Waste Management and Radiation Control, the Insurer agrees to furnish to the Director a signed duplicate original of the policy and all endorsements.

(d) Cancellation of the insurance, whether by the insurer, the insured, a parent corporation providing insurance coverage for its subsidiary, or by a firm having an insurable interest in and obtaining liability insurance on behalf of the owner or operator of the hazardous waste management facility, shall be effective only upon written notice and only after the expiration of 60 days after a copy of such written notice is received by the

Director and by the appropriate Regional Administrator.

(e) Any other termination of the insurance shall be effective only upon written notice and only after the expiration of thirty (30) days after a copy of such written notice is received by the Director.

I hereby certify that the wording of this instrument is identical to the wording specified in Subsection R315-264-151(j) as such regulation was constituted on the date first above written, and that the Insurer is licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States.

(Signature of authorized representative of Insurer)

(Type name)

(Title), Authorized Representative of (name of Insurer)

(Address of Representative)

(k) A letter of credit, as specified in Subsection R315-264-147(h) or 40 CFR 265.147(h), which is adopted by reference, shall be worded as follows, except that instructions in parentheses, (), are to be replaced with the relevant information and the parentheses deleted:

Irrevocable Standby Letter of Credit
Director, Utah Division of Waste Management and
Radiation Control

195 North 1950 West

P.O. Box 144880

Salt Lake City, UT 84114-4880

Dear Sir or Madam: We hereby establish our Irrevocable Standby Letter of Credit No. _____ in the favor of ("any and all third-party liability claimants" or insert name of trustee of the standby trust fund), at the request and for the account of (owner or operator's name and address) for third-party liability awards or settlements up to (in words) U.S. dollars \$ _____ per occurrence and the annual aggregate amount of (in words) U.S. dollars \$ _____, for sudden accidental occurrences and/or for third-party liability awards or settlements up to the amount of (in words) U.S. dollars \$ _____ per occurrence, and the annual aggregate amount of (in words) U.S. dollars \$ _____, for nonsudden accidental occurrences available upon presentation of a sight draft bearing reference to this letter of credit No. _____, and (insert the following language if the letter of credit is being used without a standby trust fund: (1) a signed certificate reading as follows:

Certificate of Valid Claim

The undersigned, as parties (insert principal) and (insert name and address of third party claimant(s)), hereby certify that the claim of bodily injury and/or property damage caused by a (sudden or nonsudden) accidental occurrence arising from operations of (principal's) hazardous waste treatment, storage, or disposal facility should be paid in the amount of \$(_____). We hereby certify that the claim does not apply to any of the following:

(a) Bodily injury or property damage for which (insert principal) is obligated to pay damages by reason of the assumption of liability in a contract or agreement. This exclusion does not apply to liability for damages that (insert principal) would be obligated to pay in the absence of the contract or agreement.

(b) Any obligation of (insert principal) under a workers' compensation, disability benefits, or unemployment compensation law or any similar law.

(c) Bodily injury to:

(1) An employee of (insert principal) arising from, and in the course of, employment by (insert principal); or

(2) The spouse, child, parent, brother or sister of that employee as a consequence of, or arising from, and in the course of employment by (insert principal).

This exclusion applies:

(A) Whether (insert principal) may be liable as an employer or in any other capacity; and

(B) To any obligation to share damages with or repay another person who shall pay damages because of the injury to persons identified in paragraphs (1) and (2).

(d) Bodily injury or property damage arising out of the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle or watercraft.

(e) Property damage to:

(1) Any property owned, rented, or occupied by (insert principal);

(2) Premises that are sold, given away or abandoned by (insert principal) if the property damage arises out of any part of those premises;

(3) Property loaned to (insert principal);

(4) Personal property in the care, custody or control of (insert principal);

(5) That particular part of real property on which (insert principal) or any contractors or subcontractors working directly or indirectly on behalf of (insert principal) are performing operations, if the property damage arises out of these operations.

(Signatures)

Grantor

(Signatures)

Claimant(s) or

(2) a valid final court order establishing a judgment against the Grantor for bodily injury or property damage caused by sudden or nonsudden accidental occurrences arising from the operation of the Grantor's facility or group of facilities.)

This letter of credit is effective as of (date) and shall expire on (date at least one year later), but such expiration date shall be automatically extended for a period of (at least one year) on (date and on each successive expiration date, unless, at least 120 days before the current expiration date, we notify you, the Director of the Utah Division of Waste Management and Radiation Control, and (owner's or operator's name) and the appropriate Regional Administrator by certified mail that we have decided not to extend this letter of credit beyond the current expiration date.

Whenever this letter of credit is drawn on under and in compliance with the terms of this credit, we shall duly honor such draft upon presentation to us.

(Insert the following language if a standby trust fund is not being used: "In the event that this letter of credit is used in combination with another mechanism for liability coverage, this letter of credit shall be considered (insert "primary" or "excess" coverage)."

We certify that the wording of this letter of credit is identical to the wording specified in Subsection R315-264-151(k) as such regulations were constituted on the date shown immediately below. (Signature(s) and title(s) of official(s) of issuing institution) (Date).

This credit is subject to (insert "the most recent edition of the Uniform Customs and Practice for Documentary Credits, published and copyrighted by the International Chamber of Commerce," or "the Uniform Commercial Code").

(l) A surety bond, as specified in Subsection R315-264-147(i) or 40 CFR 265.147(i), which is adopted by reference, shall be worded as follows: except that instructions in parentheses, (), are to be replaced with the relevant information and the parentheses deleted:

Payment Bond

Surety Bond No. (Insert number)

Parties (insert name and address of owner or operator), Principal, incorporated in (Insert State of incorporation) of (Insert city and State of principal place of business) and (Insert name and address of surety company(ies)), Surety Company(ies), of (Insert surety(ies) place of business).

EPA Identification Number, name, and address for each facility guaranteed by this bond: _____

	Table	
	Sudden accidental occurrences	Nonsudden accidental occurrences
Penal Sum Per Occurrence	(insert amount)	(insert amount)
Annual Aggregate	(insert amount)	(insert amount)

Purpose: This is an agreement between the Surety(ies) and the Principal under which the Surety(ies), its(their) successors and assignees, agree to be responsible for the payment of claims against the Principal for bodily injury and/or property damage to third parties caused by ("sudden" and/or "nonsudden") accidental occurrences arising from operations of the facility or group of facilities in the sums prescribed herein; subject to the governing provisions and the following conditions.

Governing Provisions:

(1) Section 3004 of the Resource Conservation and Recovery Act of 1976, as amended.

(2) Rules adopted by the Utah Waste Management and Radiation Control Board under the Utah Solid and Hazardous Waste Act, particularly ("Subsection R315-264-147" or "40 CFR 265.147, which is adopted by reference,") (if applicable).

Conditions:

(1) The Principal is subject to the applicable governing provisions that require the Principal to have and maintain liability coverage for bodily injury and property damage to third parties caused by ("sudden" and/or "nonsudden") accidental occurrences arising from operations of the facility or group of facilities. Such obligation does not apply to any of the following:

(a) Bodily injury or property damage for which (insert principal) is obligated to pay damages by reason of the assumption of liability in a contract or agreement. This exclusion does not apply to liability for damages that (insert principal) would be obligated to pay in the absence of the contract or agreement.

(b) Any obligation of (insert principal) under a workers' compensation, disability benefits, or unemployment compensation law or similar law.

(c) Bodily injury to:

(1) An employee of (insert principal) arising from, and in the course of, employment by (insert principal); or

(2) The spouse, child, parent, brother or sister of that employee as a consequence of, or arising from, and in the course of employment by (insert principal). This exclusion applies:

(A) Whether (insert principal) may be liable as an employer or in any other capacity; and

(B) To any obligation to share damages with or repay another person who shall pay damages because of the injury to persons identified in paragraphs (1) and (2).

(d) Bodily injury or property damage arising out of the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle or watercraft.

(e) Property damage to:

(1) Any property owned, rented, or occupied by (insert principal);

(2) Premises that are sold, given away or abandoned by (insert principal) if the property damage arises out of any part of those premises;

(3) Property loaned to (insert principal);

(4) Personal property in the care, custody or control of (insert principal);

(5) That particular part of real property on which (insert principal) or any contractors or subcontractors working directly or indirectly on behalf of (insert principal) are performing operations, if the property damage arises out of these operations.

(2) This bond assures that the Principal shall satisfy valid third party liability claims, as described in condition 1.

(3) If the Principal fails to satisfy a valid third party

liability claim, as described above, the Surety(ies) becomes liable on this bond obligation.

(4) The Surety(ies) shall satisfy a third party liability claim only upon the receipt of one of the following documents:

(a) Certification from the Principal and the third party claimant(s) that the liability claim should be paid. The certification shall be worded as follows, except that instructions in parentheses, (), are to be replaced with the relevant information and the parentheses deleted:

Certification of Valid Claim

The undersigned, as parties (insert name of Principal) and (insert name and address of third party claimant(s)), hereby certify that the claim of bodily injury and/or property damage caused by a (sudden or nonsudden) accidental occurrence arising from operating (Principal's) hazardous waste treatment, storage, or disposal facility should be paid in the amount of \$().

(Signature)

Principal

(Notary) Date

(Signature(s))

Claimant(s)

(Notary) Date

or (b) A valid final court order establishing a judgment against the Principal for bodily injury or property damage caused by sudden or nonsudden accidental occurrences arising from the operation of the Principal's facility or group of facilities.

(5) In the event of combination of this bond with another mechanism for liability coverage, this bond shall be considered (insert "primary" or "excess") coverage.

(6) The liability of the Surety(ies) shall not be discharged by any payment or succession of payments hereunder, unless and until such payment or payments shall amount in the aggregate to the penal sum of the bond. In no event shall the obligation of the Surety(ies) hereunder exceed the amount of said annual aggregate penal sum, provided that the Surety(ies) furnish(es) notice to the Director forthwith of all claims filed and payments made by the Surety(ies) under this bond.

(7) The Surety(ies) may cancel the bond by sending notice of cancellation by certified mail to the Principal and the Director and the appropriate Regional Administrator, provided, however, that cancellation shall not occur during the 120 days beginning on the date of receipt of the notice of cancellation by the Principal and the Director, as evidenced by the return receipt.

(8) The Principal may terminate this bond by sending written notice to the Surety(ies) and to the Director.

(9) The Surety(ies) hereby waive(s) notification of amendments to applicable laws, statutes, rules and regulations and agree(s) that no such amendment shall in any way alleviate its (their) obligation on this bond.

(10) This bond is effective from (insert date) (12:01 a.m., standard time, at the address of the Principal as stated herein) and shall continue in force until terminated as described above.

In Witness Whereof, the Principal and Surety(ies) have executed this Bond and have affixed their seals on the date set forth above.

The persons whose signatures appear below hereby certify that they are authorized to execute this surety bond on behalf of the Principal and Surety(ies) and that the wording of this surety bond is identical to the wording specified in Subsection R315-264-151(1), as such regulations were constituted on the date this bond was executed.

PRINCIPAL

(Signature(s))

(Name(s))

(Title(s))

(Corporate Seal)

CORPORATE SURETY(IES)

(Name and address)
 State of incorporation:
 Liability Limit: \$
 (Signature(s))
 (Name(s) and title(s))
 (Corporate seal)

(For every co-surety, provide signature(s), corporate seal, and other information in the same manner as for Surety above.)

Bond premium: \$

(m)(1) A trust agreement, as specified in Subsection R315-264-147(j) or 40 CFR 265.147(j), which is adopted by reference, shall be worded as follows, except that instructions in parentheses, (), are to be replaced with the relevant information and the parentheses deleted:

Trust Agreement

Trust Agreement, the "Agreement," entered into as of (date) by and between (name of the owner or operator) a (name of State) (insert "corporation," "partnership," "association," or "proprietorship"), the "Grantor," and (name of corporate trustee), (insert, "incorporated in the State of ____" or "a national bank"), the "trustee."

Whereas, the Utah Waste Management and Radiation Control Board, has established certain regulations applicable to the Grantor, requiring that an owner or operator of a hazardous waste management facility or group of facilities shall demonstrate financial responsibility for bodily injury and property damage to third parties caused by sudden accidental and/or nonsudden accidental occurrences arising from operations of the facility or group of facilities.

Whereas, the Grantor has elected to establish a trust to assure all or part of such financial responsibility for the facilities identified herein.

Whereas, the Grantor, acting through its duly authorized officers, has selected the Trustee to be the trustee under this agreement, and the Trustee is willing to act as trustee.

Now, therefore, the Grantor and the Trustee agree as follows:

Section 1. Definitions. As used in this Agreement:

(a) The term "Board", "Waste Management and Radiation Control Board" created pursuant to Utah Code Annotated 19-1-106.

(b) The term "Director" means the Director, of the Division of Waste Management and Radiation Control his successors, designees, and any subsequent entity of the State of Utah upon whom the duties of regulation and enforcement of regulations governing hazardous waste.

(c) The term "Grantor" means the owner or operator who enters into this Agreement and any successors or assigns of the Grantor.

(d) The term "Trustee" means the Trustee who enters into this Agreement and any successor Trustee.

Section 2. Identification of Facilities. This agreement pertains to the facilities identified on attached schedule A (on schedule A, for each facility list the EPA Identification Number, name, and address of the facility(ies) and the amount of liability coverage, or portions thereof, if more than one instrument affords combined coverage as demonstrated by this Agreement).

Section 3. Establishment of Fund. The Grantor and the Trustee hereby establish a trust fund, hereinafter the "Fund," for the benefit of any and all third parties injured or damaged by (sudden and/or nonsudden) accidental occurrences arising from operation of the facility(ies) covered by this guarantee, in the amounts of _____ (up to \$1 million) per occurrence and _____ (up to \$2 million) annual aggregate for sudden accidental occurrences and _____ (up to \$3 million) per occurrence and _____ (up to \$6 million) annual aggregate for nonsudden occurrences, except that the Fund is not established for the benefit of third parties for the following:

(a) Bodily injury or property damage for which (insert

Grantor) is obligated to pay damages by reason of the assumption of liability in a contract or agreement. This exclusion does not apply to liability for damages that (insert Grantor) would be obligated to pay in the absence of the contract or agreement.

(b) Any obligation of (insert Grantor) under a workers' compensation, disability benefits, or unemployment compensation law or any similar law.

(c) Bodily injury to:

(1) An employee of (insert Grantor) arising from, and in the course of, employment by (insert Grantor); or

(2) The spouse, child, parent, brother or sister of that employee as a consequence of, or arising from, and in the course of employment by (insert Grantor).

This exclusion applies:

(A) Whether (insert Grantor) may be liable as an employer or in any other capacity; and

(B) To any obligation to share damages with or repay another person who shall pay damages because of the injury to persons identified in paragraphs (1) and (2).

(d) Bodily injury or property damage arising out of the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle or watercraft.

(e) Property damage to:

(1) Any property owned, rented, or occupied by (insert Grantor);

(2) Premises that are sold, given away or abandoned by (insert Grantor) if the property damage arises out of any part of those premises;

(3) Property loaned to (insert Grantor);

(4) Personal property in the care, custody or control of (insert Grantor);

(5) That particular part of real property on which (insert Grantor) or any contractors or subcontractors working directly or indirectly on behalf of (insert Grantor) are performing operations, if the property damage arises out of these operations.

In the event of combination with another mechanism for liability coverage, the fund shall be considered (insert "primary" or "excess") coverage.

The Fund is established initially as consisting of the property, which is acceptable to the Trustee, described in Schedule B attached hereto. Such property and any other property subsequently transferred to the Trustee is referred to as the Fund, together with all earnings and profits thereon, less any payments or distributions made by the Trustee pursuant to this Agreement. The Fund shall be held by the Trustee, IN TRUST, as hereinafter provided. The Trustee shall not be responsible nor shall it undertake any responsibility for the amount or adequacy of, nor any duty to collect from the Grantor, any payments necessary to discharge any liabilities of the Grantor established by Director.

Section 4. Payment for Bodily Injury or Property Damage. The Trustee shall satisfy a third party liability claim by making payments from the Fund only upon receipt of one of the following documents;

(a) Certification from the Grantor and the third party claimant(s) that the liability claim should be paid. The certification shall be worded as follows, except that instructions in parentheses, (), are to be replaced with the relevant information and the parentheses deleted:

Certification of Valid Claim

The undersigned, as parties (insert Grantor) and (insert name and address of third party claimant(s)), hereby certify that the claim of bodily injury and/or property damage caused by a (sudden or nonsudden) accidental occurrence arising from operating (Grantor's) hazardous waste treatment, storage, or disposal facility should be paid in the amount of \$().

(Signatures)

Grantor

(Signatures)

Claimant(s)

(b) A valid final court order establishing a judgment against the Grantor for bodily injury or property damage caused by sudden or nonsudden accidental occurrences arising from the operation of the Grantor's facility or group of facilities.

Section 5. Payments Comprising the Fund. Payments made to the Trustee for the Fund shall consist of cash or securities acceptable to the Trustee.

Section 6. Trustee Management. The Trustee shall invest and reinvest the principal and income, in accordance with general investment policies and guidelines which the Grantor may communicate in writing to the Trustee from time to time, subject, however, to the provisions Section R315-264-151. In investing, reinvesting, exchanging, selling, and managing the Fund, the Trustee shall discharge his duties with respect to the trust fund solely in the interest of the beneficiary and with the care, skill, prudence, and diligence under the circumstance then prevailing which persons of prudence, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and with like aims; except that:

(i) Securities or other obligations of the Grantor, or any other owner or operator of the facilities, or any of their affiliates as defined in the Investment Company Act of 1940, as amended, 15 U.S.C. 80a-2.(a), shall not be acquired or held unless they are securities or other obligations of the Federal or a State government;

(ii) The Trustee is authorized to invest the Fund in time or demand deposits of the Trustee, to the extent insured by an agency of the Federal or State government; and

(iii) The Trustee is authorized to hold cash awaiting investment or distribution uninvested for a reasonable time and without liability for the payment of interest thereon.

Section 7. Commingling and Investment. The Trustee is expressly authorized in its discretion:

(a) To transfer from time to time any or all of the assets of the Fund to any common commingled, or collective trust fund created by the Trustee in which the fund is eligible to participate, subject to all of the provisions thereof, to be commingled with the assets of other trusts participating therein; and

(b) To purchase shares in any investment company registered under the Investment Company Act of 1940, 15 U.S.C. 81a-1 et seq., including one which may be created, managed, underwritten, or to which investment advice is rendered or the shares of which are sold by the Trustee. The Trustee may vote such shares in its discretion.

Section 8. Express Powers of Trustee. Without in any way limiting the powers and discretions conferred upon the Trustee by the other provisions of this Agreement or by law, the Trustee is expressly authorized and empowered:

(a) To sell, exchange, convey, transfer, or otherwise dispose of any property held by it, by public or private sale. No person dealing with the Trustee shall be bound to see to the application of the purchase money or to inquire into the validity or expediency of any such sale or other disposition;

(b) To make, execute, acknowledge, and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted;

(c) To register any securities held in the Fund in its own name or in the name of a nominee and to hold any security in bearer form or in book entry, or to combine certificates representing such securities with certificates of the same issue held by the Trustee in other fiduciary capacities, or to deposit or arrange for the deposit of such securities in a qualified central depository even though, when so deposited, such securities may be merged and held in bulk in the name of the nominee of such depository with other securities deposited therein by another

person, or to deposit or arrange for the deposit of any securities issued by the United States Government, or any agency or instrumentality thereof, with a Federal Reserve bank, but the books and records of the Trustee shall at all times show that all such securities are part of the Fund;

(d) To deposit any cash in the Fund in interest-bearing accounts maintained or savings certificates issued by the Trustee, in its separate corporate capacity, or in any other banking institution affiliated with the Trustee, to the extent insured by an agency of the Federal or State government; and

(e) To compromise or otherwise adjust all claims in favor of or against the Fund.

Section 9. Taxes and Expenses. All taxes of any kind that may be assessed or levied against or in respect of the Fund and all brokerage commissions incurred by the Fund shall be paid from the Fund. All other expenses incurred by the Trustee in connection with the administration of this Trust, including fees for legal services rendered to the Trustee, the compensation of the Trustee to the extent not paid directly by the Grantor, and all other proper charges and disbursements of the Trustee shall be paid from the Fund.

Section 10. Annual Valuations. The Trustee shall annually, at least 30 days prior to the anniversary date of establishment of the Fund, furnish to the Grantor and to the Director a statement confirming the value of the Trust. Any securities in the Fund shall be valued at market value as of no more than 60 days prior to the anniversary date of establishment of the Fund. The failure of the Grantor to object in writing to the Trustee within 90 days after the statement has been furnished to the Grantor and the Director shall constitute a conclusively binding assent by the Grantor barring the Grantor from asserting any claim or liability against the Trustee with respect to matters disclosed in the statement.

Section 11. Advice of Counsel. The Trustee may from time to time consult with counsel, who may be counsel to the Grantor with respect to any question arising as to the construction of this Agreement or any action to be taken hereunder. The Trustee shall be fully protected, to the extent permitted by law, in acting upon the advice of counsel.

Section 12. Trustee Compensation. The Trustee shall be entitled to reasonable compensation for its services as agreed upon in writing from time to time with the Grantor.

Section 13. Successor Trustee. The Trustee may resign or the Grantor may replace the Trustee, but such resignation or replacement shall not be effective until the Grantor has appointed a successor trustee and this successor accepts the appointment. The successor trustee shall have the same powers and duties as those conferred upon the Trustee hereunder. Upon the successor trustee's acceptance of the appointment, the Trustee shall assign, transfer, and pay over to the successor trustee the funds and properties then constituting the Fund. If for any reason the Grantor cannot or does not act in the event of the resignation of the Trustee, the Trustee may apply to a court of competent jurisdiction for the appointment of a successor trustee or for instructions. The successor trustee shall specify the date on which it assumes administration of the trust in a writing sent to the Grantor, the Director, and the present Trustee by certified mail 10 days before such change becomes effective. Any expenses incurred by the Trustee as a result of any of the acts contemplated by this section shall be paid as provided in Section 9.

Section 14. Instructions to the Trustee. All orders, requests, and instructions by the Grantor to the Trustee shall be in writing, signed by such persons as are designated in the attached Exhibit A or such other designees as the Grantor may designate by amendments to Exhibit A. The Trustee shall be fully protected in acting without inquiry in accordance with the Grantor's orders, requests, and instructions. All orders, requests, and instructions by the Director to the Trustee shall be

in writing, signed by the Director and the Trustee shall act and shall be fully protected in acting in accordance with such orders, requests, and instructions. The Trustee shall have the right to assume, in the absence of written notice to the contrary, that no event constituting a change or a termination of the authority of any person to act on behalf of the Grantor or the Director hereunder has occurred. The Trustee shall have no duty to act in the absence of such orders, requests, and instructions from the Grantor and/or the Director, except as provided for herein.

Section 15. Notice of Nonpayment. If a payment for bodily injury or property damage is made under Section 4 of this trust, the Trustee shall notify the Grantor of such payment and the amount(s) thereof within five (5) working days. The Grantor shall, on or before the anniversary date of the establishment of the Fund following such notice, either make payments to the Trustee in amounts sufficient to cause the trust to return to its value immediately prior to the payment of claims under Section 4, or shall provide written proof to the Trustee that other financial assurance for liability coverage has been obtained equalling the amount necessary to return the trust to its value prior to the payment of claims. If the Grantor does not either make payments to the Trustee or provide the Trustee with such proof, the Trustee shall within 10 working days after the anniversary date of the establishment of the Fund provide a written notice of nonpayment to the Director and to the appropriate Regional Administrator.

Section 16. Amendment of Agreement. This Agreement may be amended by an instrument in writing executed by the Grantor, the Trustee, and the Director, or by the Trustee and the Director if the Grantor ceases to exist.

Section 17. Irrevocability and Termination. Subject to the right of the parties to amend this Agreement as provided in Section 16, this Trust shall be irrevocable and shall continue until terminated at the written agreement of the Grantor, the Trustee, and the Director, or by the Trustee and the Director, if the Grantor ceases to exist. Upon termination of the Trust, all remaining trust property, less final trust administration expenses, shall be delivered to the Grantor.

The Director shall agree to termination of the Trust when the owner or operator substitutes alternate financial assurance as specified in this section.

Section 18. Immunity and Indemnification. The Trustee shall not incur personal liability of any nature in connection with any act or omission, made in good faith, in the administration of this Trust, or in carrying out any directions by the Grantor or the Director issued in accordance with this Agreement. The Trustee shall be indemnified and saved harmless by the Grantor or from the Trust Fund, or both, from and against any personal liability to which the Trustee may be subjected by reason of any act or conduct in its official capacity, including all expenses reasonably incurred in its defense in the event the Grantor fails to provide such defense.

Section 19. Choice of Law. This Agreement shall be administered, construed, and enforced according to the laws of the State of Utah.

Section 20. Interpretation. As used in this Agreement, words in the singular include the plural and words in the plural include the singular. The descriptive headings for each section of this Agreement shall not affect the interpretation or the legal efficacy of this Agreement.

In Witness Whereof the parties have caused this Agreement to be executed by their respective officers duly authorized and their corporate seals to be hereunto affixed and attested as of the date first above written. The parties below certify that the wording of this Agreement is identical to the wording specified in Subsection R315-264-151(m) as such regulations were constituted on the date first above written.

(Signature of Grantor)
(Title)

Attest:
(Title)
(Seal)
(Signature of Trustee)

Attest:
(Title)
(Seal)

(2) The following is an example of the certification of acknowledgement which shall accompany the trust agreement for a trust fund as specified in Subsection R315-264-147(j) or 40 CFR 265.147(j), which is adopted by reference.

State of
County of

On this (date), before me personally came (owner or operator) to me known, who, being by me duly sworn, did depose and say that she/he resides at (address), that she/he is (title) of (corporation), the corporation described in and which executed the above instrument; that she/he knows the seal of said corporation; that the seal affixed to such instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation, and that she/he signed her/his name thereto by like order.

(Signature of Notary Public)

(n)(1) A standby trust agreement, as specified in Subsection R315-264-147(h) or 40 CFR 265.147(h), which is adopted by reference, shall be worded as follows, except that instructions in parentheses, (), are to be replaced with the relevant information and the parentheses deleted:

Standby Trust Agreement

Trust Agreement, the "Agreement," entered into as of (date) by and between (name of the owner or operator) a (name of a State) (insert "corporation," "partnership," "association," or "proprietorship"), the "Grantor," and (name of corporate trustee), (insert, "incorporated in the State of _____" or "a national bank"), the "trustee."

Whereas the Utah Waste Management and Radiation Control Board, in accordance with the Utah Solid and Hazardous Waste Act, has established certain regulations applicable to the Grantor, requiring that an owner or operator of a hazardous waste management facility or group of facilities shall demonstrate financial responsibility for bodily injury and property damage to third parties caused by sudden accidental and/or nonsudden accidental occurrences arising from operations of the facility or group of facilities.

Whereas, the Grantor has elected to establish a standby trust into which the proceeds from a letter of credit may be deposited to assure all or part of such financial responsibility for the facilities identified herein.

Whereas, the Grantor, acting through its duly authorized officers, has selected the Trustee to be the trustee under this agreement, and the Trustee is willing to act as trustee.

Now, therefore, the Grantor and the Trustee agree as follows:

Section 1. Definitions. As used in this Agreement:

(a) The term "Board", "Waste Management and Radiation Control Board" created pursuant to Utah Code Annotated 19-1-106.

(b) The term "Director" means the Director of the Division of Waste Management and Radiation Control, his successors, designees, and any subsequent entity of the State of Utah upon whom the duties of regulation and enforcement of regulations governing hazardous waste are granted.

(c) The term Grantor means the owner or operator who enters into this Agreement and any successors or assigns of the Grantor.

(d) The term Trustee means the Trustee who enters into this Agreement and any successor Trustee.

Section 2. Identification of Facilities. This agreement pertains to the facilities identified on attached schedule A (on

schedule A, for each facility list the EPA Identification Number, name, and address of the facility(ies) and the amount of liability coverage, or portions thereof, if more than one instrument affords combined coverage as demonstrated by this Agreement).

Section 3. Establishment of Fund. The Grantor and the Trustee hereby establish a standby trust fund, hereafter the "Fund," for the benefit of any and all third parties injured or damaged by (sudden and/or nonsudden) accidental occurrences arising from operation of the facility(ies) covered by this guarantee, in the amounts of _____ (up to \$1 million) per occurrence and _____ (up to \$2 million) annual aggregate for sudden accidental occurrences and _____ (up to \$3 million) per occurrence and _____ (up to \$6 million) annual aggregate for nonsudden occurrences, except that the Fund is not established for the benefit of third parties for the following:

(a) Bodily injury or property damage for which (insert Grantor) is obligated to pay damages by reason of the assumption of liability in a contract or agreement. This exclusion does not apply to liability for damages that (insert Grantor) would be obligated to pay in the absence of the contract or agreement.

(b) Any obligation of (insert Grantor) under a workers' compensation, disability benefits, or unemployment compensation law or any similar law.

(c) Bodily injury to:

(1) An employee of (insert Grantor) arising from, and in the course of, employment by (insert Grantor); or

(2) The spouse, child, parent, brother or sister of that employee as a consequence of, or arising from, and in the course of employment by (insert Grantor).

This exclusion applies:

(A) Whether (insert Grantor) may be liable as an employer or in any other capacity; and

(B) To any obligation to share damages with or repay another person who shall pay damages because of the injury to persons identified in paragraphs (1) and (2).

(d) Bodily injury or property damage arising out of the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle or watercraft.

(e) Property damage to:

(1) Any property owned, rented, or occupied by (insert Grantor);

(2) Premises that are sold, given away or abandoned by (insert Grantor) if the property damage arises out of any part of those premises;

(3) Property loaned by (insert Grantor);

(4) Personal property in the care, custody or control of (insert Grantor);

(5) That particular part of real property on which (insert Grantor) or any contractors or subcontractors working directly or indirectly on behalf of (insert Grantor) are performing operations, if the property damage arises out of these operations.

In the event of combination with another mechanism for liability coverage, the fund shall be considered (insert "primary" or "excess") coverage.

The Fund is established initially as consisting of the proceeds of the letter of credit deposited into the Fund. Such proceeds and any other property subsequently transferred to the Trustee is referred to as the Fund, together with all earnings and profits thereon, less any payments or distributions made by the Trustee pursuant to this Agreement. The Fund shall be held by the Trustee, IN TRUST, as hereinafter provided. The Trustee shall not be responsible nor shall it undertake any responsibility for the amount or adequacy of, nor any duty to collect from the Grantor, any payments necessary to discharge any liabilities of the Grantor established by the Director of the Utah Division of Waste Management and Radiation Control.

Section 4. Payment for Bodily Injury or Property Damage. The Trustee shall satisfy a third party liability claim by drawing

on the letter of credit described in Schedule B and by making payments from the Fund only upon receipt of one of the following documents:

(a) Certification from the Grantor and the third party claimant(s) that the liability claim should be paid. The certification shall be worded as follows, except that instructions in parentheses, (), are to be replaced with the relevant information and the parentheses deleted:

Certification of Valid Claim

The undersigned, as parties (insert Grantor) and (insert name and address of third party claimant(s)), hereby certify that the claim of bodily injury and/or property damage caused by a (sudden or nonsudden) accidental occurrence arising from operating (Grantor's) hazardous waste treatment, storage, or disposal facility should be paid in the amount of \$(_____).

(Signature)

Grantor

(Signatures)

Claimant(s)

(b) A valid final court order establishing a judgment against the Grantor for bodily injury or property damage caused by sudden or nonsudden accidental occurrences arising from the operation of the Grantor's facility or group of facilities.

Section 5. Payments Comprising the Fund. Payments made to the Trustee for the Fund shall consist of the proceeds from the letter of credit drawn upon by the Trustee in accordance with the requirements of Subsection R315-264-151(k) and Section 4 of this Agreement.

Section 6. Trustee Management. The Trustee shall invest and reinvest the principal and income, in accordance with general investment policies and guidelines which the Grantor may communicate in writing to the Trustee from time to time, subject, however, to the provisions Section R315-264-151. In investing, reinvesting, exchanging, selling, and managing the Fund, the Trustee shall discharge his duties with respect to the trust fund solely in the interest of the beneficiary and with the care, skill, prudence, and diligence under the circumstances then prevailing which persons of prudence, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and with like aims; except that:

(i) Securities or other obligations of the Grantor, or any other owner or operator of the facilities, or any of their affiliates as defined in the Investment Company Act of 1940, as amended, 15 U.S.C. 80a-2(a), shall not be acquired or held, unless they are securities or other obligations of the Federal or a State government;

(ii) The Trustee is authorized to invest the Fund in time or demand deposits of the Trustee, to the extent insured by an agency of the Federal or a State government; and

(iii) The Trustee is authorized to hold cash awaiting investment or distribution uninvested for a reasonable time and without liability for the payment of interest thereon.

Section 7. Commingling and Investment. The Trustee is expressly authorized in its discretion:

(a) To transfer from time to time any or all of the assets of the Fund to any common, commingled, or collective trust fund created by the Trustee in which the Fund is eligible to participate, subject to all of the provisions thereof, to be commingled with the assets of other trusts participating therein; and

(b) To purchase shares in any investment company registered under the Investment Company Act of 1940, 15 U.S.C. 80a-1 et seq., including one which may be created, managed, underwritten, or to which investment advice is rendered or the shares of which are sold by the Trustee. The Trustee may vote such shares in its discretion.

Section 8. Express Powers of Trustee. Without in any way limiting the powers and discretions conferred upon the Trustee by the other provisions of this Agreement or by law, the Trustee

is expressly authorized and empowered:

(a) To sell, exchange, convey, transfer, or otherwise dispose of any property held by it, by public or private sale. No person dealing with the Trustee shall be bound to see to the application of the purchase money or to inquire into the validity or expediency of any such sale or other disposition;

(b) To make, execute, acknowledge, and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted;

(c) To register any securities held in the Fund in its own name or in the name of a nominee and to hold any security in bearer form or in book entry, or to combine certificates representing such securities with certificates of the same issue held by the Trustee in other fiduciary capacities, or to deposit or arrange for the deposit of such securities in a qualified central depository even though, when so deposited, such securities may be merged and held in bulk in the name of the nominee of such depository with other securities deposited therein by another person, or to deposit or arrange for the deposit of any securities issued by the United States Government, or any agency or instrumentality thereof, with a Federal Reserve Bank, but the books and records of the Trustee shall at all times show that all such securities are part of the Fund;

(d) To deposit any cash in the Fund in interest-bearing accounts maintained or savings certificates issued by the Trustee, in its separate corporate capacity, or in any other banking institution affiliated with the Trustee, to the extent insured by an agency of the Federal or State government; and

(e) To compromise or otherwise adjust all claims in favor of or against the Fund.

Section 9. Taxes and Expenses. All taxes of any kind that may be assessed or levied against or in respect of the Fund and all brokerage commissions incurred by the Fund shall be paid from the Fund. All other expenses incurred by the Trustee in connection with the administration of this Trust, including fees for legal services rendered to the Trustee, the compensation of the Trustee to the extent not paid directly by the Grantor, and all other proper charges and disbursements to the Trustee shall be paid from the Fund.

Section 10. Advice of Counsel. The Trustee may from time to time consult with counsel, who may be counsel to the Grantor, with respect to any question arising as to the construction of this Agreement or any action to be taken hereunder. The Trustee shall be fully protected, to the extent permitted by law, in acting upon the advice of counsel.

Section 11. Trustee Compensation. The Trustee shall be entitled to reasonable compensation for its services as agreed upon in writing from time to time with the Grantor.

Section 12. Successor Trustee. The Trustee may resign or the Grantor may replace the Trustee, but such resignation or replacement shall not be effective until the Grantor has appointed a successor trustee and this successor accepts the appointment. The successor trustee shall have the same powers and duties as those conferred upon the Trustee hereunder. Upon the successor trustee's acceptance of the appointment, the Trustee shall assign, transfer, and pay over to the successor trustee the funds and properties then constituting the Fund. If for any reason the Grantor cannot or does not act in the event of the resignation of the Trustee, the Trustee may apply to a court of competent jurisdiction for the appointment of a successor trustee or for instructions. The successor trustee shall specify the date on which it assumes administration of the trust in a writing sent to the Grantor, the Director and the present Trustee by certified mail 10 days before such change becomes effective. Any expenses incurred by the Trustee as a result of any of the acts contemplated by this Section shall be paid as provided in Section 9.

Section 13. Instructions to the Trustee. All orders,

requests, certifications of valid claims, and instructions to the Trustee shall be in writing, signed by such persons as are designated in the attached Exhibit A or such other designees as the Grantor may designate by amendments to Exhibit A. The Trustee shall be fully protected in acting without inquiry in accordance with the Grantor's orders, requests, and instructions. The Trustee shall have the right to assume, in the absence of written notice to the contrary, that no event constituting a change or a termination of the authority of any person to act on behalf of the Grantor or the Director hereunder has occurred. The Trustee shall have no duty to act in the absence of such orders, requests, and instructions from the Grantor and/or the Director, except as provided for herein.

Section 14. Amendment of Agreement. This Agreement may be amended by an instrument in writing executed by the Grantor, the Trustee, and the Director, or by the Trustee and the Director if the Grantor ceases to exist.

Section 15. Irrevocability and Termination. Subject to the right of the parties to amend this Agreement as provided in Section 14, this Trust shall be irrevocable and shall continue until terminated at the written agreement of the Grantor, the Trustee, and the Director, or by the Trustee and the Director, if the Grantor ceases to exist. Upon termination of the Trust, all remaining trust property, less final trust administration expenses, shall be paid to the Grantor.

The Director shall agree to termination of the Trust when the owner or operator substitutes alternative financial assurance as specified in this section.

Section 16. Immunity and indemnification. The Trustee shall not incur personal liability of any nature in connection with any act or omission, made in good faith, in the administration of this Trust, or in carrying out any directions by the Grantor and the Director issued in accordance with this Agreement. The Trustee shall be indemnified and saved harmless by the Grantor or from the Trust Fund, or both, from and against any personal liability to which the Trustee may be subjected by reason of any act or conduct in its official capacity, including all expenses reasonably incurred in its defense in the event the Grantor fails to provide such defense.

Section 17. Choice of Law. This Agreement shall be administered, construed, and enforced according to the laws of the State of Utah.

Section 18. Interpretation. As used in this Agreement, words in the singular include the plural and words in the plural include the singular. The descriptive headings for each Section of this Agreement shall not affect the interpretation of the legal efficacy of this Agreement.

In Witness Whereof the parties have caused this Agreement to be executed by their respective officers duly authorized and their corporate seals to be hereunto affixed and attested as of the date first above written. The parties below certify that the wording of this Agreement is identical to the wording specified in Subsection R315-264-151(n) as such regulations were constituted on the date first above written.

(Signature of Grantor)

(Title)

Attest:

(Title)

(Seal)

(Signature of Trustee)

Attest:

(Title)

(Seal)

(2) The following is an example of the certification of acknowledgement which shall accompany the trust agreement for a standby trust fund as specified in Subsection R315-264-147(h) or 40 CFR 265.147(h), which is adopted by reference.

State of

County of

On this (date), before me personally came (owner or operator) to me known, who, being by me duly sworn, did depose and say that she/he resides at (address), that she/he is (title) of (corporation), the corporation described in and which executed the above instrument; that she/he knows the seal of said corporation; that the seal affixed to such instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation, and that she/he signed her/his name thereto by like order.

(Signature of Notary Public)

R315-264-170. Use and Management of Containers -- Applicability.

The regulations in Sections R315-264-170 through 179 apply to owners and operators of all hazardous waste facilities that store hazardous waste in containers, except as Section R315-264-1 provides otherwise.

Under Section R315-261-7 and Subsection R315-261-33(c), if a hazardous waste is emptied from a container the residue remaining in the container is not considered a hazardous waste if the container is "empty" as defined in Section R315-261-7. In that event, management of the container is exempt from the requirements of Sections R315-264-170 through 179.

R315-264-171. Condition of Containers.

If a container holding hazardous waste is not in good condition, e.g., severe rusting, apparent structural defects, or if it begins to leak, the owner or operator shall transfer the hazardous waste from this container to a container that is in good condition or manage the waste in some other way that complies with the requirements of Rule R315-264.

R315-264-172. Compatibility of Waste with Containers.

The owner or operator shall use a container made of or lined with materials which will not react with, and are otherwise compatible with, the hazardous waste to be stored, so that the ability of the container to contain the waste is not impaired.

R315-264-173. Management of Containers.

(a) A container holding hazardous waste shall always be closed during storage, except when it is necessary to add or remove waste.

(b) A container holding hazardous waste shall not be opened, handled, or stored in a manner which may rupture the container or cause it to leak.

Comment: Reuse of containers in transportation is governed by U.S. Department of Transportation regulations including those set forth in 49 CFR 173.28.

R315-264-174. Use and Management of Containers -- Inspections.

At least weekly, the owner or operator shall inspect areas where containers are stored. The owner or operator shall look for leaking containers and for deterioration of containers and the containment system caused by corrosion or other factors.

See Subsection R315-264-15(c) and Section R315-264-171 for remedial action required if deterioration or leaks are detected.

R315-264-175. Containment.

(a) Container storage areas shall have a containment system that is designed and operated in accordance with Subsection R315-264-175(b), except as otherwise provided by Subsection R315-264-175(c).

(b) A containment system shall be designed and operated as follows:

(1) A base shall underlie the containers which is free of cracks or gaps and is sufficiently impervious to contain leaks, spills, and accumulated precipitation until the collected material

is detected and removed;

(2) The base shall be sloped or the containment system shall be otherwise designed and operated to drain and remove liquids resulting from leaks, spills, or precipitation, unless the containers are elevated or are otherwise protected from contact with accumulated liquids;

(3) The containment system shall have sufficient capacity to contain 10% of the volume of containers or the volume of the largest container, whichever is greater. Containers that do not contain free liquids need not be considered in this determination;

(4) Run-on into the containment system shall be prevented unless the collection system has sufficient excess capacity in addition to that required in Subsection R315-264-175(b)(3) to contain any run-on which might enter the system; and

(5) Spilled or leaked waste and accumulated precipitation shall be removed from the sump or collection area in as timely a manner as is necessary to prevent overflow of the collection system.

If the collected material is a hazardous waste under Rule R315-261, it shall be managed as a hazardous waste in accordance with all applicable requirements of Rules R315-262 through 266. If the collected material is discharged through a point source to waters of the United States, it is subject to the requirements of section 402 of the Clean Water Act, as amended.

(c) Storage areas that store containers holding only wastes that do not contain free liquids need not have a containment system defined by Subsection R315-264-175(b), except as provided by Subsection R315-264-175(d) or provided that:

(1) The storage area is sloped or is otherwise designed and operated to drain and remove liquid resulting from precipitation, or

(2) The containers are elevated or are otherwise protected from contact with accumulated liquid.

(d) Storage areas that store containers holding the wastes listed below that do not contain free liquids shall have a containment system defined by Subsection R315-264-175(b):

(1) F020, F021, F022, F023, F026 and F027.

R315-264-176. Special Requirements for Ignitable or Reactive Waste.

Containers holding ignitable or reactive waste shall be located at least 15 meters, 50 feet, from the facility's property line. See Subsection R315-264-17(a) for additional requirements.

R315-264-177. Special Requirements for Incompatible Wastes.

(a) Incompatible wastes, or incompatible wastes and materials, see appendix V of Rule R315-264 for examples, shall not be placed in the same container, unless Subsection R35-264-17(b) is complied with.

(b) Hazardous waste shall not be placed in an unwashed container that previously held an incompatible waste or material. As required by Section R315-264-13, the waste analysis plan shall include analyses needed to comply with Section R315-264-177. Also, Subsection R315-264-17(c) requires wastes analyses, trial tests or other documentation to assure compliance with Subsection R315-264-17(b). As required by Section R315-264-73, the owner or operator shall place the results of each waste analysis and trial test, and any documented information, in the operating record of the facility.

(c) A storage container holding a hazardous waste that is incompatible with any waste or other materials stored nearby in other containers, piles, open tanks, or surface impoundments shall be separated from the other materials or protected from them by means of a dike, berm, wall, or other device. The purpose of Section R315-264-177 is to prevent fires,

explosions, gaseous emission, leaching, or other discharge of hazardous waste or hazardous waste constituents which could result from the mixing of incompatible wastes or materials if containers break or leak.

R315-264-178. Closure.

At closure, all hazardous waste and hazardous waste residues shall be removed from the containment system. Remaining containers, liners, bases, and soil containing or contaminated with hazardous waste or hazardous waste residues shall be decontaminated or removed. At closure, as throughout the operating period, unless the owner or operator can demonstrate in accordance with Subsection R315-261-3(d) that the solid waste removed from the containment system is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and shall manage it in accordance with all applicable requirements of Rules R315-262 through 266.

R315-264-179. Air Emission Standards.

The owner or operator shall manage all hazardous waste placed in a container in accordance with the applicable requirements of Sections R315-264-1030 through 1036, 1050 through 1065, and 1080 through 1090.

R315-264-190. Tank Systems - Applicability.

The requirements of Sections R315-264-190 through 200 apply to owners and operators of facilities that use tank systems for storing or treating hazardous waste except as otherwise provided in Subsections R315-264-190(a), (b), and (c) or in Section R315-264-1.

(a) Tank systems that are used to store or treat hazardous waste which contains no free liquids and are situated inside a building with an impermeable floor are exempted from the requirements in Section R315-264-193. To demonstrate the absence or presence of free liquids in the stored/treated waste, the following test shall be used: Method 9095B, Paint Filter Liquids Test, as described in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference in R315-260-11.

(b) Tank systems, including sumps, as defined in Section R315-260-10, that serve as part of a secondary containment system to collect or contain releases of hazardous wastes are exempted from the requirements in Subsection R315-264-193(a).

(c) Tanks, sumps, and other such collection devices or systems used in conjunction with drip pads, as defined in Section R315-260-10 and regulated under Sections R315-264-570 through 575, shall meet the requirements of Sections R315-264-190 through 200.

R315-264-191. Tank Systems -- Assessment of Existing Tank System's Integrity.

(a) For each existing tank system that does not have secondary containment meeting the requirements of Section R315-264-193, the owner or operator shall determine that the tank system is not leaking or is otherwise fit for use. Except as provided in Subsection R315-264-191(c), the owner or operator shall obtain and keep on file at the facility a written assessment reviewed and certified by a qualified Professional Engineer, in accordance with Subsection R315-270-11(d), that attests to the tank system's integrity.

(b) This assessment shall determine that the tank system is adequately designed and has sufficient structural strength and compatibility with the waste(s) to be stored or treated, to ensure that it will not collapse, rupture, or fail. At a minimum, this assessment shall consider the following:

- (1) Design standard(s), if available, according to which the tank and ancillary equipment were constructed;
- (2) Hazardous characteristics of the waste(s) that have

been and will be handled;

- (3) Existing corrosion protection measures;
- (4) Documented age of the tank system, if available (otherwise, an estimate of the age); and
- (5) Results of a leak test, internal inspection, or other tank integrity examination such that:

(i) For non-enterable underground tanks, the assessment shall include a leak test that is capable of taking into account the effects of temperature variations, tank end deflection, vapor pockets, and high water table effects, and

(ii) For other than non-enterable underground tanks and for ancillary equipment, this assessment shall include either a leak test, as described above, or other integrity examination that is certified by a qualified Professional Engineer in accordance with Subsection R315-270-11(d), that addresses cracks, leaks, corrosion, and erosion.

Note: The practices described in the American Petroleum Institute (API) Publication, Guide for Inspection of Refinery Equipment, Chapter XIII, "Atmospheric and Low-Pressure Storage Tanks," 4th edition, 1981, may be used, where applicable, as guidelines in conducting other than a leak test.

(c) Tank systems that store or treat materials that become hazardous wastes subsequent to July 14, 1986, shall conduct this assessment within 12 months after the date that the waste becomes a hazardous waste.

(d) If, as a result of the assessment conducted in accordance with Subsection R315-264-191(a), a tank system is found to be leaking or unfit for use, the owner or operator shall comply with the requirements of Section R315-264-196.

R315-264-192. Design and Installation of New Tank Systems or Components.

(a) Owners or operators of new tank systems or components shall obtain and submit to the Director, at time of submittal of part B information, a written assessment, reviewed and certified by a qualified Professional Engineer, in accordance with Subsection R315-270-11(d), attesting that the tank system has sufficient structural integrity and is acceptable for the storing and treating of hazardous waste. The assessment shall show that the foundation, structural support, seams, connections, and pressure controls, if applicable, are adequately designed and that the tank system has sufficient structural strength, compatibility with the waste(s) to be stored or treated, and corrosion protection to ensure that it will not collapse, rupture, or fail. This assessment, which shall be used by the Director to review and approve or disapprove the acceptability of the tank system design, shall include, at a minimum, the following information:

(1) Design standard(s) according to which tank(s) and/or the ancillary equipment are constructed;

(2) Hazardous characteristics of the waste(s) to be handled;

(3) For new tank systems or components in which the external shell of a metal tank or any external metal component of the tank system will be in contact with the soil or with water, a determination by a corrosion expert of:

(i) Factors affecting the potential for corrosion, including but not limited to:

- (A) Soil moisture content;
- (B) Soil pH;
- (C) Soil sulfides level;
- (D) Soil resistivity;
- (E) Structure to soil potential;
- (F) Influence of nearby underground metal structures, e.g., piping;

(G) Existence of stray electric current;

(H) Existing corrosion-protection measures, e.g., coating, cathodic protection, and

(ii) The type and degree of external corrosion protection

that are needed to ensure the integrity of the tank system during the use of the tank system or component, consisting of one or more of the following:

(A) Corrosion-resistant materials of construction such as special alloys, fiberglass reinforced plastic, etc.;

(B) Corrosion-resistant coating, such as epoxy, fiberglass, etc., with cathodic protection, e.g., impressed current or sacrificial anodes; and

(C) Electrical isolation devices such as insulating joints, flanges, etc.

Note: The practices described in the National Association of Corrosion Engineers (NACE) standard, "Recommended Practice (RP-02-85)-Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems," and the American Petroleum Institute (API) Publication 1632, "Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems," may be used, where applicable, as guidelines in providing corrosion protection for tank systems.

(4) For underground tank system components that are likely to be adversely affected by vehicular traffic, a determination of design or operational measures that will protect the tank system against potential damage; and

(5) Design considerations to ensure that:

(i) Tank foundations will maintain the load of a full tank;

(ii) Tank systems shall be anchored to prevent flotation or dislodgment where the tank system is placed in a saturated zone, or is located within a seismic fault zone subject to the standards of Subsection R315-264-18(a); and

(iii) Tank systems shall withstand the effects of frost heave.

(b) The owner or operator of a new tank system shall ensure that proper handling procedures are adhered to in order to prevent damage to the system during installation. Prior to covering, enclosing, or placing a new tank system or component in use, an independent, qualified, installation inspector or a qualified Professional Engineer, either of whom is trained and experienced in the proper installation of tanks systems or components, shall inspect the system for the presence of any of the following items:

(1) Weld breaks;

(2) Punctures;

(3) Scrapes of protective coatings;

(4) Cracks;

(5) Corrosion;

(6) Other structural damage or inadequate construction/installation. All discrepancies shall be remedied before the tank system is covered, enclosed, or placed in use.

(c) New tank systems or components that are placed underground and that are backfilled shall be provided with a backfill material that is a noncorrosive, porous, homogeneous substance and that is installed so that the backfill is placed completely around the tank and compacted to ensure that the tank and piping are fully and uniformly supported.

(d) All new tanks and ancillary equipment shall be tested for tightness prior to being covered, enclosed, or placed in use. If a tank system is found not to be tight, all repairs necessary to remedy the leak(s) in the system shall be performed prior to the tank system being covered, enclosed, or placed into use.

(e) Ancillary equipment shall be supported and protected against physical damage and excessive stress due to settlement, vibration, expansion, or contraction.

Note: The piping system installation procedures described in American Petroleum Institute (API) Publication 1615 (November 1979), "Installation of Underground Petroleum Storage Systems," or ANSI Standard B31.3, "Petroleum Refinery Piping," and ANSI Standard B31.4 "Liquid Petroleum Transportation Piping System," may be used, where applicable, as guidelines for proper installation of piping systems.

(f) The owner or operator shall provide the type and degree of corrosion protection recommended by an independent corrosion expert, based on the information provided under Subsection R315-264-192(a)(3), or other corrosion protection if the Director believes other corrosion protection is necessary to ensure the integrity of the tank system during use of the tank system. The installation of a corrosion protection system that is field fabricated shall be supervised by an independent corrosion expert to ensure proper installation.

(g) The owner or operator shall obtain and keep on file at the facility written statements by those persons required to certify the design of the tank system and supervise the installation of the tank system in accordance with the requirements of Subsections R315-264-192(b) through (f), that attest that the tank system was properly designed and installed and that repairs, pursuant to Subsections R315-264-192(b) and (d), were performed. These written statements shall also include the certification statement as required in Subsection R315-270-11(d).

R315-264-193. Containment and Detection of Releases.

(a) In order to prevent the release of hazardous waste or hazardous constituents to the environment, secondary containment that meets the requirements of Section R315-264-193 shall be provided, except as provided in Subsections R315-264-193(f) and (g):

(1) For all new and existing tank systems or components, prior to their being put into service.

(2) For tank systems that store or treat materials that become hazardous wastes, within two years of the hazardous waste listing, or when the tank system has reached 15 years of age, whichever comes later.

(b) Secondary containment systems shall be:

(1) Designed, installed, and operated to prevent any migration of wastes or accumulated liquid out of the system to the soil, ground water, or surface water at any time during the use of the tank system; and

(2) Capable of detecting and collecting releases and accumulated liquids until the collected material is removed.

(c) To meet the requirements of Subsection R315-264-193(b), secondary containment systems shall be at a minimum:

(1) Constructed of or lined with materials that are compatible with the wastes(s) to be placed in the tank system and shall have sufficient strength and thickness to prevent failure owing to pressure gradients, including static head and external hydrological forces, physical contact with the waste to which it is exposed, climatic conditions, and the stress of daily operation, including stresses from nearby vehicular traffic.

(2) Placed on a foundation or base capable of providing support to the secondary containment system, resistance to pressure gradients above and below the system, and capable of preventing failure due to settlement, compression, or uplift;

(3) Provided with a leak-detection system that is designed and operated so that it will detect the failure of either the primary or secondary containment structure or the presence of any release of hazardous waste or accumulated liquid in the secondary containment system within 24 hours, or at the earliest practicable time if the owner or operator can demonstrate to the Director that existing detection technologies or site conditions shall not allow detection of a release within 24 hours; and

(4) Sloped or otherwise designed or operated to drain and remove liquids resulting from leaks, spills, or precipitation. Spilled or leaked waste and accumulated precipitation shall be removed from the secondary containment system within 24 hours, or in as timely a manner as is possible to prevent harm to human health and the environment, if the owner or operator can demonstrate to the Director that removal of the released waste or accumulated precipitation cannot be accomplished within 24 hours.

Note: If the collected material is a hazardous waste under Rule R315-261, it is subject to management as a hazardous waste in accordance with all applicable requirements of Rules R315-262 through 265. If the collected material is discharged through a point source to waters of the United States, it is subject to the requirements of sections 301, 304, and 402 of the Clean Water Act, as amended. If discharged to a Publicly Owned Treatment Works (POTW), it is subject to the requirements of section 307 of the Clean Water Act, as amended. If the collected material is released to the environment, it may be subject to the reporting requirements of 40 CFR part 302.

(d) Secondary containment for tanks shall include one or more of the following devices:

- (1) A liner, external to the tank;
- (2) A vault;
- (3) A double-walled tank; or
- (4) An equivalent device as approved by the Director.

(e) In addition to the requirements of Subsections R315-264-193(b), (c), and (d), secondary containment systems shall satisfy the following requirements:

(1) External liner systems shall be:

- (i) Designed or operated to contain 100 percent of the capacity of the largest tank within its boundary;
- (ii) Designed or operated to prevent run-on or infiltration of precipitation into the secondary containment system unless the collection system has sufficient excess capacity to contain run-on or infiltration. Such additional capacity shall be sufficient to contain precipitation from a 25-year, 24-hour rainfall event.
- (iii) Free of cracks or gaps; and
- (iv) Designed and installed to surround the tank completely and to cover all surrounding earth likely to come into contact with the waste if the waste is released from the tank(s), i.e., capable of preventing lateral as well as vertical migration of the waste.

(2) Vault systems shall be:

- (i) Designed or operated to contain 100 percent of the capacity of the largest tank within its boundary;
- (ii) Designed or operated to prevent run-on or infiltration of precipitation into the secondary containment system unless the collection system has sufficient excess capacity to contain run-on or infiltration. Such additional capacity shall be sufficient to contain precipitation from a 25-year, 24-hour rainfall event;
- (iii) Constructed with chemical-resistant water stops in place at all joints, if any;
- (iv) Provided with an impermeable interior coating or lining that is compatible with the stored waste and that shall prevent migration of waste into the concrete;
- (v) Provided with a means to protect against the formation of and ignition of vapors within the vault, if the waste being stored or treated:

(A) Meets the definition of ignitable waste under Section R315-261-21; or

(B) Meets the definition of reactive waste under Section R315-261-23, and may form an ignitable or explosive vapor; and

(vi) Provided with an exterior moisture barrier or be otherwise designed or operated to prevent migration of moisture into the vault if the vault is subject to hydraulic pressure.

(3) Double-walled tanks shall be:

(i) Designed as an integral structure, i.e., an inner tank completely enveloped within an outer shell, so that any release from the inner tank is contained by the outer shell;

(ii) Protected, if constructed of metal, from both corrosion of the primary tank interior and of the external surface of the outer shell; and

(iii) Provided with a built-in continuous leak detection

system capable of detecting a release within 24 hours, or at the earliest practicable time, if the owner or operator can demonstrate to the Director, and the Director concludes, that the existing detection technology or site conditions would not allow detection of a release within 24 hours.

Note: The provisions outlined in the Steel Tank Institute's (STI) "Standard for Dual Wall Underground Steel Storage Tanks" may be used as guidelines for aspects of the design of underground steel double-walled tanks.

(f) Ancillary equipment shall be provided with secondary containment, e.g., trench, jacketing, double-walled piping, that meets the requirements of Subsections R315-264-193(b) and (c) except for:

(1) Aboveground piping, exclusive of flanges, joints, valves, and other connections, that are visually inspected for leaks on a daily basis;

(2) Welded flanges, welded joints, and welded connections, that are visually inspected for leaks on a daily basis;

(3) Sealless or magnetic coupling pumps and sealless valves, that are visually inspected for leaks on a daily basis; and

(4) Pressurized aboveground piping systems with automatic shut-off devices, e.g., excess flow check valves, flow metering shutdown devices, loss of pressure actuated shut-off devices, that are visually inspected for leaks on a daily basis.

(g) The owner or operator may obtain a variance from the requirements Section R315-264-193 if the Director finds, as a result of a demonstration by the owner or operator that alternative design and operating practices, together with location characteristics, will prevent the migration of any hazardous waste or hazardous constituents into the ground water; or surface water at least as effectively as secondary containment during the active life of the tank system or that in the event of a release that does migrate to ground water or surface water, no substantial present or potential hazard will be posed to human health or the environment. New underground tank systems may not, per a demonstration in accordance with Subsection R315-264-193(g)(2), be exempted from the secondary containment requirements Section R315-264-193.

(1) In deciding whether to grant a variance based on a demonstration of equivalent protection of ground water and surface water, the Director shall consider:

- (i) The nature and quantity of the wastes;
- (ii) The proposed alternate design and operation;
- (iii) The hydrogeologic setting of the facility, including the thickness of soils present between the tank system and ground water; and
- (iv) All other factors that would influence the quality and mobility of the hazardous constituents and the potential for them to migrate to ground water or surface water.

(2) In deciding whether to grant a variance based on a demonstration of no substantial present or potential hazard, the Director shall consider:

(i) The potential adverse effects on ground water, surface water, and land quality taking into account:

(A) The physical and chemical characteristics of the waste in the tank system, including its potential for migration,

(B) The hydrogeological characteristics of the facility and surrounding land,

(C) The potential for health risks caused by human exposure to waste constituents,

(D) The potential for damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents, and

(E) The persistence and permanence of the potential adverse effects;

(ii) The potential adverse effects of a release on ground-water quality, taking into account:

(A) The quantity and quality of ground water and the

direction of ground-water flow,

(B) The proximity and withdrawal rates of ground-water users,

(C) The current and future uses of ground water in the area, and

(D) The existing quality of ground water, including other sources of contamination and their cumulative impact on the ground-water quality;

(iii) The potential adverse effects of a release on surface water quality, taking into account:

(A) The quantity and quality of ground water and the direction of ground-water flow,

(B) The patterns of rainfall in the region,

(C) The proximity of the tank system to surface waters,

(D) The current and future uses of surface waters in the area and any water quality standards established for those surface waters, and

(E) The existing quality of surface water, including other sources of contamination and the cumulative impact on surface-water quality; and

(iv) The potential adverse effects of a release on the land surrounding the tank system, taking into account:

(A) The patterns of rainfall in the region, and

(B) The current and future uses of the surrounding land.

(3) The owner or operator of a tank system, for which a variance from secondary containment had been granted in accordance with the requirements of Subsection R315-264-193(g)(1), at which a release of hazardous waste has occurred from the primary tank system but has not migrated beyond the zone of engineering control, as established in the variance, shall:

(i) Comply with the requirements of Section R315-264-196, except Subsection R315-264-193(d), and

(ii) Decontaminate or remove contaminated soil to the extent necessary to:

(A) Enable the tank system for which the variance was granted to resume operation with the capability for the detection of releases at least equivalent to the capability it had prior to the release; and

(B) Prevent the migration of hazardous waste or hazardous constituents to ground water or surface water; and

(iii) If contaminated soil cannot be removed or decontaminated in accordance with Subsection R315-264-193(g)(3)(ii), comply with the requirement of Subsection R315-264-197(b).

(4) The owner or operator of a tank system, for which a variance from secondary containment had been granted in accordance with the requirements of Subsection R315-264-193(g)(1), at which a release of hazardous waste has occurred from the primary tank system and has migrated beyond the zone of engineering control, as established in the variance, shall:

(i) Comply with the requirements of Subsections R315-264-196(a), (b), (c), and (d); and

(ii) Prevent the migration of hazardous waste or hazardous constituents to ground water or surface water, if possible, and decontaminate or remove contaminated soil. If contaminated soil cannot be decontaminated or removed or if ground water has been contaminated, the owner or operator shall comply with the requirements of Subsection R315-264-197(b); and

(iii) If repairing, replacing, or reinstalling the tank system, provide secondary containment in accordance with the requirements of Subsections R315-264-193(a) through (f) or reapply for a variance from secondary containment and meet the requirements for new tank systems in Section R315-264-192 if the tank system is replaced. The owner or operator shall comply with these requirements even if contaminated soil can be decontaminated or removed and ground water or surface water has not been contaminated.

(h) The following procedures shall be followed in order to request a variance from secondary containment:

(1) The Director shall be notified in writing by the owner or operator that he intends to conduct and submit a demonstration for a variance from secondary containment as allowed in Subsection R315-264-193(g) according to the following schedule:

(i) For existing tank systems, at least 24 months prior to the date that secondary containment shall be provided in accordance with Subsection R315-264-193(a).

(ii) For new tank systems, at least 30 days prior to entering into a contract for installation.

(2) As part of the notification, the owner or operator shall also submit to the Director a description of the steps necessary to conduct the demonstration and a timetable for completing each of the steps. The demonstration shall address each of the factors listed in Subsection R315-264-193(g)(1) or (g)(2);

(3) The demonstration for a variance shall be completed within 180 days after notifying the Director of an intent to conduct the demonstration; and

(4) If a variance is granted under Subsection R315-264-193(h), the Director shall require the permittee to construct and operate the tank system in the manner that was demonstrated to meet the requirements for the variance.

(i) All tank systems, until such time as secondary containment that meets the requirements Section R315-264-193 is provided, shall comply with the following:

(1) For non-enterable underground tanks, a leak test that meets the requirements of Subsection R315-264-191(b)(5) or other tank integrity method, as approved or required by the Director, shall be conducted at least annually.

(2) For other than non-enterable underground tanks, the owner or operator shall either conduct a leak test as in Subsection R315-264-193(i)(1) or develop a schedule and procedure for an assessment of the overall condition of the tank system by a qualified Professional Engineer. The schedule and procedure shall be adequate to detect obvious cracks, leaks, and corrosion or erosion that may lead to cracks and leaks. The owner or operator shall remove the stored waste from the tank, if necessary, to allow the condition of all internal tank surfaces to be assessed. The frequency of these assessments shall be based on the material of construction of the tank and its ancillary equipment, the age of the system, the type of corrosion or erosion protection used, the rate of corrosion or erosion observed during the previous inspection, and the characteristics of the waste being stored or treated.

(3) For ancillary equipment, a leak test or other integrity assessment as approved by the Director shall be conducted at least annually.

Note: The practices described in the American Petroleum Institute (API) Publication Guide for Inspection of Refinery Equipment, Chapter XIII, "Atmospheric and Low-Pressure Storage Tanks," 4th edition, 1981, may be used, where applicable, as guidelines for assessing the overall condition of the tank system.

(4) The owner or operator shall maintain on file at the facility a record of the results of the assessments conducted in accordance with Subsections R315-264-193(i)(1) through (i)(3).

(5) If a tank system or component is found to be leaking or unfit for use as a result of the leak test or assessment in Subsections R315-264-193(i)(1) through (i)(3), the owner or operator shall comply with the requirements of Section R315-264-196.

R315-264-194. General Operating Requirements.

(a) Hazardous wastes or treatment reagents shall not be placed in a tank system if they could cause the tank, its ancillary equipment, or the containment system to rupture, leak, corrode, or otherwise fail.

(b) The owner or operator shall use appropriate controls and practices to prevent spills and overflows from tank or

containment systems. These include at a minimum:

- (1) Spill prevention controls, e.g., check valves, dry disconnect couplings;
 - (2) Overfill prevention controls, e.g., level sensing devices, high level alarms, automatic feed cutoff, or bypass to a standby tank; and
 - (3) Maintenance of sufficient freeboard in uncovered tanks to prevent overtopping by wave or wind action or by precipitation.
- (c) The owner or operator shall comply with the requirements of Section R315-264-196 if a leak or spill occurs in the tank system.

R315-264-195. Tank Systems -- Inspections.

- (a) The owner or operator shall develop and follow a schedule and procedure for inspecting overfill controls.
- (b) The owner or operator shall inspect at least once each operating day data gathered from monitoring and leak detection equipment, e.g., pressure or temperature gauges, monitoring wells, to ensure that the tank system is being operated according to its design.

Note: Subsection R315-264-15(c) requires the owner or operator to remedy any deterioration or malfunction he finds. Section R315-264-196 requires the owner or operator to notify the Director within 24 hours of confirming a leak. Also, 40 CFR part 302 may require the owner or operator to notify the National Response Center of a release.

(c) In addition, except as noted under Subsection R315-264-195(d), the owner or operator shall inspect at least once each operating day:

- (1) Above ground portions of the tank system, if any, to detect corrosion or releases of waste.
- (2) The construction materials and the area immediately surrounding the externally accessible portion of the tank system, including the secondary containment system, e.g., dikes, to detect erosion or signs of releases of hazardous waste, e.g., wet spots, dead vegetation.
- (d) Owners or operators of tank systems that either use leak detection systems to alert facility personnel to leaks, or implement established workplace practices to ensure leaks are promptly identified, shall inspect at least weekly those areas described in Subsections R315-264-195(c)(1) and (c)(2). Use of the alternate inspection schedule shall be documented in the facility's operating record. This documentation shall include a description of the established workplace practices at the facility.
- (e) Reserved
- (f) Ancillary equipment that is not provided with secondary containment, as described in Subsections R315-264-193(f)(1) through (4), shall be inspected at least once each operating day.

(g) The owner or operator shall inspect cathodic protection systems, if present, according to, at a minimum, the following schedule to ensure that they are functioning properly:

- (1) The proper operation of the cathodic protection system shall be confirmed within six months after initial installation and annually thereafter; and
- (2) All sources of impressed current shall be inspected and/or tested, as appropriate, at least bimonthly, i.e., every other month.

Note: The practices described in the National Association of Corrosion Engineers (NACE) standard, "Recommended Practice (RP-02-85)-Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems," and the American Petroleum Institute (API) Publication 1632, "Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems," may be used, where applicable, as guidelines in maintaining and inspecting cathodic protection systems.

- (h) The owner or operator shall document in the operating

record of the facility an inspection of those items in Subsections R315-264-195(a) through (c).

R315-264-196. Response to Leaks or Spills and Disposition of Leaking or Unfit-for-Use Tank Systems.

A tank system or secondary containment system from which there has been a leak or spill, or which is unfit for use, shall be removed from service immediately, and the owner or operator shall satisfy the following requirements:

(a) Cessation of use; prevent flow or addition of wastes. The owner or operator shall immediately stop the flow of hazardous waste into the tank system or secondary containment system and inspect the system to determine the cause of the release.

(b) Removal of waste from tank system or secondary containment system.

(1) If the release was from the tank system, the owner/operator shall, within 24 hours after detection of the leak or, if the owner/operator demonstrates that it is not possible, at the earliest practicable time, remove as much of the waste as is necessary to prevent further release of hazardous waste to the environment and to allow inspection and repair of the tank system to be performed.

(2) If the material released was to a secondary containment system, all released materials shall be removed within 24 hours or in as timely a manner as is possible to prevent harm to human health and the environment.

(c) Containment of visible releases to the environment. The owner/operator shall immediately conduct a visual inspection of the release and, based upon that inspection:

- (1) Prevent further migration of the leak or spill to soils or surface water; and
- (2) Remove, and properly dispose of, any visible contamination of the soil or surface water.

(d) Notifications, reports.

(1) Any release to the environment, except as provided in Subsection R315-264-196(d)(2), shall be reported to the Director within 24 hours of its detection. If the release has been reported pursuant to 40 CFR part 302, that report shall satisfy this requirement.

(2) A leak or spill of hazardous waste is exempted from the requirements of Subsection R315-264-196(d) if it is:

- (i) Less than or equal to a quantity of one (1) pound, and
- (ii) Immediately contained and cleaned up.

(3) Within 30 days of detection of a release to the environment, a report containing the following information shall be submitted to the Director:

- (i) Likely route of migration of the release;
- (ii) Characteristics of the surrounding soil, soil composition, geology, hydrogeology, climate;
- (iii) Results of any monitoring or sampling conducted in connection with the release, if available. If sampling or monitoring data relating to the release are not available within 30 days, these data shall be submitted to the Director as soon as they become available.

(iv) Proximity to downgradient drinking water, surface water, and populated areas; and

(v) Description of response actions taken or planned.

(e) Provision of secondary containment, repair, or closure.

(1) Unless the owner/operator satisfies the requirements of Subsection R315-264-196(e)(2) through (4), the tank system shall be closed in accordance with Section R315-264-197.

(2) If the cause of the release was a spill that has not damaged the integrity of the system, the owner/operator may return the system to service as soon as the released waste is removed and repairs, if necessary, are made.

(3) If the cause of the release was a leak from the primary tank system into the secondary containment system, the system shall be repaired prior to returning the tank system to service.

(4) If the source of the release was a leak to the environment from a component of a tank system without secondary containment, the owner/operator shall provide the component of the system from which the leak occurred with secondary containment that satisfies the requirements of Section R315-264-193 before it can be returned to service, unless the source of the leak is an aboveground portion of a tank system that can be inspected visually. If the source is an aboveground component that can be inspected visually, the component shall be repaired and may be returned to service without secondary containment as long as the requirements of Subsection R315-264-196(f) are satisfied. If a component is replaced to comply with the requirements of Subsection R315-264-196(e)(4), that component shall satisfy the requirements for new tank systems or components in Sections R315-264-192 and 193. Additionally, if a leak has occurred in any portion of a tank system component that is not readily accessible for visual inspection, e.g., the bottom of an inground or onground tank, the entire component shall be provided with secondary containment in accordance with Section R315-264-193 prior to being returned to use.

(f) Certification of major repairs. If the owner/operator has repaired a tank system in accordance with Subsection R315-264-196(e), and the repair has been extensive, e.g., installation of an internal liner; repair of a ruptured primary containment or secondary containment vessel, the tank system shall not be returned to service unless the owner/operator has obtained a certification by a qualified Professional Engineer in accordance with Subsection R315-270-11(d) that the repaired system is capable of handling hazardous wastes without release for the intended life of the system. This certification shall be placed in the operating record and maintained until closure of the facility.

Note: The Director may, on the basis of any information received that there is or has been a release of hazardous waste or hazardous constituents into the environment, issue an order requiring corrective action or such other response as deemed necessary to protect human health or the environment.

Note: See Subsection R315-264-15(c) for the requirements necessary to remedy a failure. Also, 40 CFR part 302 may require the owner or operator to notify the National Response Center of certain releases.

R315-264-197. Closure and Post-Closure Care.

(a) At closure of a tank system, the owner or operator shall remove or decontaminate all waste residues, contaminated containment system components, liners, etc., contaminated soils, and structures and equipment contaminated with waste, and manage them as hazardous waste, unless Subsection R315-261-3(d) applies. The closure plan, closure activities, cost estimates for closure, and financial responsibility for tank systems shall meet all of the requirements specified in Sections R315-264-110 through 120, 140 through 151.

(b) If the owner or operator demonstrates that not all contaminated soils can be practicably removed or decontaminated as required in Subsection R315-264-197(a), then the owner or operator shall close the tank system and perform post-closure care in accordance with the closure and post-closure care requirements that apply to landfills, Subsection R315-264-310. In addition, for the purposes of closure, post-closure, and financial responsibility, such a tank system is then considered to be a landfill, and the owner or operator shall meet all of the requirements for landfills specified in Sections R315-264-110 through 120, 140 through 151.

(c) If an owner or operator has a tank system that does not have secondary containment that meets the requirements of Subsections R315-264-193(b) through (f) and has not been granted a variance from the secondary containment requirements in accordance with Subsection R315-264-193(g), then:

(1) The closure plan for the tank system shall include both

a plan for complying with Subsection R315-264-197(a) and a contingent plan for complying with Subsection R315-264-197(b).

(2) A contingent post-closure plan for complying with Subsection R315-264-197(b) shall be prepared and submitted as part of the permit application.

(3) The cost estimates calculated for closure and post-closure care shall reflect the costs of complying with the contingent closure plan and the contingent post-closure plan, if those costs are greater than the costs of complying with the closure plan prepared for the expected closure under Subsection R315-264-197(a).

(4) Financial assurance shall be based on the cost estimates in Subsection R315-264-197(c)(3).

(5) For the purposes of the contingent closure and post-closure plans, such a tank system is considered to be a landfill, and the contingent plans shall meet all of the closure, post-closure, and financial responsibility requirements for landfills under Sections R315-264-110 through 120, 140 through 148, and 151.

R315-264-198. Special Requirements for Ignitable or Reactive Wastes.

(a) Ignitable or reactive waste shall not be placed in tank systems, unless:

(1) The waste is treated, rendered, or mixed before or immediately after placement in the tank system so that:

(i) The resulting waste, mixture, or dissolved material no longer meets the definition of ignitable or reactive waste under Sections R315-261-21 or 23, and

(ii) Subsection R315-264-17(b) is complied with; or

(2) The waste is stored or treated in such a way that it is protected from any material or conditions that may cause the waste to ignite or react; or

(3) The tank system is used solely for emergencies.

(b) The owner or operator of a facility where ignitable or reactive waste is stored or treated in a tank shall comply with the requirements for the maintenance of protective distances between the waste management area and any public ways, streets, alleys, or an adjoining property line that can be built upon as required in Tables 2-1 through 2-6 of the National Fire Protection Association's "Flammable and Combustible Liquids Code," (1977 or 1981), incorporated by reference, see Section R315-260-11.

R315-264-199. Special Requirements for Incompatible Wastes.

(a) Incompatible wastes, or incompatible wastes and materials, shall not be placed in the same tank system, unless Subsection R315-264-17(b) is complied with.

(b) Hazardous waste shall not be placed in a tank system that has not been decontaminated and that previously held an incompatible waste or material, unless Subsection R315-264-17(b) is complied with.

R315-264-200. Air Emission Standards.

The owner or operator shall manage all hazardous waste placed in a tank in accordance with the applicable requirements of Sections R315-264-1030 through 1036, 1050 through 1065 and 1080 through 1090.

R315-264-220. Surface Impoundments -- Applicability.

The regulations in Sections R315-264-220 through 223 and 226 through 232 apply to owners and operators of facilities that use surface impoundments to treat, store, or dispose of hazardous waste except as Section R315-264-1 provides otherwise.

R315-264-221. Design and Operating Requirements.

(a) Any surface impoundment that is not covered by Subsection R315-264-221(c) or 40 CFR 265.221, which is adopted by reference, shall have a liner for all portions of the impoundment, except for existing portions of such impoundments. The liner shall be designed, constructed, and installed to prevent any migration of wastes out of the impoundment to the adjacent subsurface soil or ground water or surface water at any time during the active life, including the closure period, of the impoundment. The liner may be constructed of materials that may allow wastes to migrate into the liner, but not into the adjacent subsurface soil or ground water or surface water, during the active life of the facility, provided that the impoundment is closed in accordance with Subsection R315-264-228(a)(1). For impoundments that will be closed in accordance with Subsection R315-264-228(a)(2), the liner shall be constructed of materials that can prevent wastes from migrating into the liner during the active life of the facility. The liner shall be:

(1) Constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients, including static head and external hydrogeologic forces, physical contact with the waste or leachate to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operation;

(2) Placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression, or uplift; and

(3) Installed to cover all surrounding earth likely to be in contact with the waste or leachate.

(b) The owner or operator shall be exempted from the requirements of Subsection R315-264-221(a) if the Director finds, based on a demonstration by the owner or operator, that alternate design and operating practices, together with location characteristics, shall prevent the migration of any hazardous constituents, see Subsection R315-264-93, into the ground water or surface water at any future time. In deciding whether to grant an exemption, the Director shall consider:

(1) The nature and quantity of the wastes;

(2) The proposed alternate design and operation;

(3) The hydrogeologic setting of the facility, including the attenuative capacity and thickness of the liners and soils present between the impoundment and ground water or surface water; and

(4) All other factors which would influence the quality and mobility of the leachate produced and the potential for it to migrate to ground water or surface water.

(c) The owner or operator of each new surface impoundment unit on which construction commences after January 29, 1992, each lateral expansion of a surface impoundment unit on which construction commences after July 29, 1992 and each replacement of an existing surface impoundment unit that is to commence reuse after July 29, 1992 shall install two or more liners and a leachate collection and removal system between such liners. "Construction commences" is as defined in Section R315-260-10 under "existing facility".

(1)(i) The liner system shall include:

(A) A top liner designed and constructed of materials, e.g., a geomembrane, to prevent the migration of hazardous constituents into such liner during the active life and post-closure care period; and

(B) A composite bottom liner, consisting of at least two components. The upper component shall be designed and constructed of materials, e.g., a geomembrane, to prevent the migration of hazardous constituents into this component during the active life and post-closure care period. The lower component shall be designed and constructed of materials to minimize the migration of hazardous constituents if a breach in

the upper component were to occur. The lower component shall be constructed of at least 3 feet, 91 cm, of compacted soil material with a hydraulic conductivity of no more than 1×10^{-7} cm/sec.

(ii) The liners shall comply with Subsections R315-264-221(a)(1), (2), and (3).

(2) The leachate collection and removal system between the liners, and immediately above the bottom composite liner in the case of multiple leachate collection and removal systems, is also a leak detection system. This leak detection system shall be capable of detecting, collecting, and removing leaks of hazardous constituents at the earliest practicable time through all areas of the top liner likely to be exposed to waste or leachate during the active life and post-closure care period. The requirements for a leak detection system in Subsection R315-264-221(c)(2) are satisfied by installation of a system that is, at a minimum:

(i) Constructed with a bottom slope of one percent or more;

(ii) Constructed of granular drainage materials with a hydraulic conductivity of 1×10^{-1} cm/sec or more and a thickness of 12 inches (30.5 cm) or more; or constructed of synthetic or geonet drainage materials with a transmissivity of 3×10^{-4} m²/sec or more;

(iii) Constructed of materials that are chemically resistant to the waste managed in the surface impoundment and the leachate expected to be generated, and of sufficient strength and thickness to prevent collapse under the pressures exerted by overlying wastes and any waste cover materials or equipment used at the surface impoundment;

(iv) Designed and operated to minimize clogging during the active life and post-closure care period; and

(v) Constructed with sumps and liquid removal methods, e.g., pumps, of sufficient size to collect and remove liquids from the sump and prevent liquids from backing up into the drainage layer. Each unit shall have its own sump(s). The design of each sump and removal system shall provide a method for measuring and recording the volume of liquids present in the sump and of liquids removed.

(3) The owner or operator shall collect and remove pumpable liquids in the sumps to minimize the head on the bottom liner.

(4) The owner or operator of a leak detection system that is not located completely above the seasonal high water table shall demonstrate that the operation of the leak detection system will not be adversely affected by the presence of ground water.

(d) The Director may approve alternative design or operating practices to those specified in Subsection R315-264-221(c) if the owner or operator demonstrates to the Director that such design and operating practices, together with location characteristics:

(1) Will prevent the migration of any hazardous constituent into the ground water or surface water at least as effectively as the liners and leachate collection and removal system specified in Subsection R315-264-221(c); and

(2) Will allow detection of leaks of hazardous constituents through the top liner at least as effectively.

(e) The double liner requirement set forth in Subsection R315-264-221(c) may be waived by the Director for any monofill, if:

(1) The monofill contains only hazardous wastes from foundry furnace emission controls or metal casting molding sand, and such wastes do not contain constituents which would render the wastes hazardous for reasons other than the toxicity characteristic in Section R315-261-24; and

(2)(i)(A) The monofill has at least one liner for which there is no evidence that such liner is leaking. For the purposes of Subsection R315-264-221(e), the term "liner" means a liner designed, constructed, installed, and operated to prevent

hazardous waste from passing into the liner at any time during the active life of the facility, or a liner designed, constructed, installed, and operated to prevent hazardous waste from migrating beyond the liner to adjacent subsurface soil, ground water, or surface water at any time during the active life of the facility. In the case of any surface impoundment which has been exempted from the requirements of Subsection R315-264-221(c) on the basis of a liner designed, constructed, installed, and operated to prevent hazardous waste from passing beyond the liner, at the closure of such impoundment, the owner or operator shall remove or decontaminate all waste residues, all contaminated liner material, and contaminated soil to the extent practicable. If all contaminated soil is not removed or decontaminated, the owner or operator of such impoundment will comply with appropriate post-closure requirements, including but not limited to ground-water monitoring and corrective action;

(B) The monofill is located more than one-quarter mile from an "underground source of drinking water," as that term is defined in Section R315-270-2; and

(C) The monofill is in compliance with generally applicable ground-water monitoring requirements for facilities with permits under Section 19-6-108; or

(ii) The owner or operator demonstrates that the monofill is located, designed and operated so as to assure that there will be no migration of any hazardous constituent into ground water or surface water at any future time.

(f) The owner or operator of any replacement surface impoundment unit is exempt from Subsection R315-264-221(c) if:

(1) The existing unit was constructed in compliance with the design standards of sections 3004 (o)(1)(A)(i) and (o)(5) of the Resource Conservation and Recovery Act; and

(2) There is no reason to believe that the liner is not functioning as designed.

(g) A surface impoundment shall be designed, constructed, maintained, and operated to prevent overtopping resulting from normal or abnormal operations; overfilling; wind and wave action; rainfall; run-on; malfunctions of level controllers, alarms, and other equipment; and human error.

(h) A surface impoundment shall have dikes that are designed, constructed, and maintained with sufficient structural integrity to prevent massive failure of the dikes. In ensuring structural integrity, it shall not be presumed that the liner system will function without leakage during the active life of the unit.

(i) The Director shall specify in the permit all design and operating practices that are necessary to ensure that the requirements of Section R315-264-221 are satisfied.

R315-264-222. Action Leakage Rate.

(a) The Director shall approve an action leakage rate for surface impoundment units subject to Subsections R315-264-221(c) or (d). The action leakage rate is the maximum design flow rate that the leak detection system can remove without the fluid head on the bottom liner exceeding one foot. The action leakage rate shall include an adequate safety margin to allow for uncertainties in the design, e.g., slope, hydraulic conductivity, thickness of drainage material, construction, operation, and location of the leak detection system, waste and leachate characteristics, likelihood and amounts of other sources of liquids in the leak detection system, and proposed response actions, e.g., the action leakage rate shall consider decreases in the flow capacity of the system over time resulting from siltation and clogging, rib layover and creep of synthetic components of the system, overburden pressures, etc.

(b) To determine if the action leakage rate has been exceeded, the owner or operator shall convert the weekly or monthly flow rate from the monitoring data obtained under Subsection R315-264-226(d) to an average daily flow rate,

gallons per acre per day, for each sump. Unless the Director approves a different calculation, the average daily flow rate for each sump shall be calculated weekly during the active life and closure period, and if the unit is closed in accordance with Subsection R315-264-228(b), monthly during the post-closure care period when monthly monitoring is required under Subsection R315-264-226(d).

R315-264-223. Response Actions.

(a) The owner or operator of surface impoundment units subject to Subsection R315-264-221(c) or (d) shall have an approved response action plan before receipt of waste. The response action plan shall set forth the actions to be taken if the action leakage rate has been exceeded. At a minimum, the response action plan shall describe the actions specified in Subsection R315-264-223(b).

(b) If the flow rate into the leak detection system exceeds the action leakage rate for any sump, the owner or operator shall:

(1) Notify the Director in writing of the exceedance within 7 days of the determination;

(2) Submit a preliminary written assessment to the Director within 14 days of the determination, as to the amount of liquids, likely sources of liquids, possible location, size, and cause of any leaks, and short-term actions taken and planned;

(3) Determine to the extent practicable the location, size, and cause of any leak;

(4) Determine whether waste receipt should cease or be curtailed, whether any waste should be removed from the unit for inspection, repairs, or controls, and whether or not the unit should be closed;

(5) Determine any other short-term and longer-term actions to be taken to mitigate or stop any leaks; and

(6) Within 30 days after the notification that the action leakage rate has been exceeded, submit to the Director the results of the analyses specified in Subsections R315-264-223(b)(3), (4), and (5), the results of actions taken, and actions planned. Monthly thereafter, as long as the flow rate in the leak detection system exceeds the action leakage rate, the owner or operator shall submit to the Director a report summarizing the results of any remedial actions taken and actions planned.

(c) To make the leak and/or remediation determinations in Subsections R315-264-223(b)(3), (4), and (5), the owner or operator shall:

(1)(i) Assess the source of liquids and amounts of liquids by source,

(ii) Conduct a fingerprint, hazardous constituent, or other analyses of the liquids in the leak detection system to identify the source of liquids and possible location of any leaks, and the hazard and mobility of the liquid; and

(iii) Assess the seriousness of any leaks in terms of potential for escaping into the environment; or

(2) Document why such assessments are not needed.

R315-264-226. Monitoring and Inspection.

(a) During construction and installation, liners, except in the case of existing portions of surface impoundments exempt from Subsection R315-264-221(a), and cover systems, e.g., membranes, sheets, or coatings, shall be inspected for uniformity, damage, and imperfections, e.g., holes, cracks, thin spots, or foreign materials. Immediately after construction or installation:

(1) Synthetic liners and covers shall be inspected to ensure tight seams and joints and the absence of tears, punctures, or blisters; and

(2) Soil-based and admixed liners and covers shall be inspected for imperfections including lenses, cracks, channels, root holes, or other structural non-uniformities that may cause an increase in the permeability of the liner or cover.

(b) While a surface impoundment is in operation, it shall be inspected weekly and after storms to detect evidence of any of the following:

- (1) Deterioration, malfunctions, or improper operation of overtopping control systems;
- (2) Sudden drops in the level of the impoundment's contents; and
- (3) Severe erosion or other signs of deterioration in dikes or other containment devices.

(c) Prior to the issuance of a permit, and after any extended period of time, at least six months, during which the impoundment was not in service, the owner or operator shall obtain a certification from a qualified engineer that the impoundment's dike, including that portion of any dike which provides freeboard, has structural integrity. The certification shall establish, in particular, that the dike:

- (1) Will withstand the stress of the pressure exerted by the types and amounts of wastes to be placed in the impoundment; and
- (2) Will not fail due to scouring or piping, without dependence on any liner system included in the surface impoundment construction.

(d)(1) An owner or operator required to have a leak detection system under Subsection R315-264-221(c) or (d) shall record the amount of liquids removed from each leak detection system sump at least once each week during the active life and closure period.

(2) After the final cover is installed, the amount of liquids removed from each leak detection system sump shall be recorded at least monthly. If the liquid level in the sump stays below the pump operating level for two consecutive months, the amount of liquids in the sumps shall be recorded at least quarterly. If the liquid level in the sump stays below the pump operating level for two consecutive quarters, the amount of liquids in the sumps shall be recorded at least semi-annually. If at any time during the post-closure care period the pump operating level is exceeded at units on quarterly or semi-annual recording schedules, the owner or operator shall return to monthly recording of amounts of liquids removed from each sump until the liquid level again stays below the pump operating level for two consecutive months.

(3) "Pump operating level" is a liquid level proposed by the owner or operator and approved by the Director based on pump activation level, sump dimensions, and level that avoids backup into the drainage layer and minimizes head in the sump.

R315-264-227. Emergency Repairs; Contingency Plans.

(a) A surface impoundment shall be removed from service in accordance with Subsection R315-264-227(b) when:

- (1) The level of liquids in the impoundment suddenly drops and the drop is not known to be caused by changes in the flows into or out of the impoundment; or
- (2) The dike leaks.

(b) When a surface impoundment shall be removed from service as required by Subsection R315-264-227(a), the owner or operator shall:

- (1) Immediately shut off the flow or stop the addition of wastes into the impoundment;
- (2) Immediately contain any surface leakage which has occurred or is occurring;
- (3) Immediately stop the leak;
- (4) Take any other necessary steps to stop or prevent catastrophic failure;
- (5) If a leak cannot be stopped by any other means, empty the impoundment; and
- (6) Notify the Director of the problem in writing within seven days after detecting the problem.

(c) As part of the contingency plan required in Sections R315-264-50 through 56, the owner or operator shall specify a

procedure for complying with the requirements of Subsection R315-264-227(b).

(d) No surface impoundment that has been removed from service in accordance with the requirements of Section R315-264-227 may be restored to service unless the portion of the impoundment which was failing is repaired and the following steps are taken:

(1) If the impoundment was removed from service as the result of actual or imminent dike failure, the dike's structural integrity shall be recertified in accordance with Subsection R315-264-226(c).

(2) If the impoundment was removed from service as the result of a sudden drop in the liquid level, then:

(i) For any existing portion of the impoundment, a liner shall be installed in compliance with Subsection R315-264-221(a); and

(ii) For any other portion of the impoundment, the repaired liner system shall be certified by a qualified engineer as meeting the design specifications approved in the permit.

(e) A surface impoundment that has been removed from service in accordance with the requirements of Section R315-264-227 and that is not being repaired shall be closed in accordance with the provisions of Section R315-264-228.

R315-264-228. Closure and Post-Closure Care.

(a) At closure, the owner or operator shall:

(1) Remove or decontaminate all waste residues, contaminated containment system components, liners, etc., contaminated subsoils, and structures and equipment contaminated with waste and leachate, and manage them as hazardous waste unless Subsection R315-261-3(d) applies; or

(2)(i) Eliminate free liquids by removing liquid wastes or solidifying the remaining wastes and waste residues;

(ii) Stabilize remaining wastes to a bearing capacity sufficient to support final cover; and

(iii) Cover the surface impoundment with a final cover designed and constructed to:

(A) Provide long-term minimization of the migration of liquids through the closed impoundment;

(B) Function with minimum maintenance;

(C) Promote drainage and minimize erosion or abrasion of the final cover;

(D) Accommodate settling and subsidence so that the cover's integrity is maintained; and

(E) Have a permeability less than or equal to the permeability of any bottom liner system or natural subsoils present.

(b) If some waste residues or contaminated materials are left in place at final closure, the owner or operator shall comply with all post-closure requirements contained in Sections R315-264-117 through 120, including maintenance and monitoring throughout the post-closure care period, specified in the permit under Section R315-264-117. The owner or operator shall:

(1) Maintain the integrity and effectiveness of the final cover, including making repairs to the cap as necessary to correct the effects of settling, subsidence, erosion, or other events;

(2) Maintain and monitor the leak detection system in accordance with Subsections R315-264-221(c)(2)(iv) and (3) and 226(d), and comply with all other applicable leak detection system requirements of Rule R315-264;

(3) Maintain and monitor the ground-water monitoring system and comply with all other applicable requirements of Sections R315-264-90 through 101; and

(4) Prevent run-on and run-off from eroding or otherwise damaging the final cover.

(c)(1) If an owner or operator plans to close a surface impoundment in accordance with Subsection R315-264-228(a)(1), and the impoundment does not comply with the liner

requirements of Subsection R315-264-221(a) and is not exempt from them in accordance with Subsection R315-264-221(b), then:

(i) The closure plan for the impoundment under Section R315-264-112 shall include both a plan for complying with Subsection R315-264-228(a)(1) and a contingent plan for complying with Subsection R315-264-228(a)(2) in case not all contaminated subsoils can be practicably removed at closure; and

(ii) The owner or operator shall prepare a contingent post-closure plan under Section R315-264-118 for complying with Subsection R315-264-228(b) in case not all contaminated subsoils can be practicably removed at closure.

(2) The cost estimates calculated under Sections R315-264-142 and 264-144 for closure and post-closure care of an impoundment subject to Subsection R315-264-228(c) shall include the cost of complying with the contingent closure plan and the contingent post-closure plan, but are not required to include the cost of expected closure under Subsection R315-264-228(a)(1).

R315-264-229. Special Requirements for Ignitable or Reactive Waste.

Ignitable or reactive waste shall not be placed in a surface impoundment, unless the waste and impoundment satisfy all applicable requirements of Rule R315-268, and:

(a) The waste is treated, rendered, or mixed before or immediately after placement in the impoundment so that:

(1) The resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive waste under Sections R315-261-21 or 23; and

(2) Subsection R315-264-17(b) is complied with; or

(b) The waste is managed in such a way that it is protected from any material or conditions which may cause it to ignite or react; or

(c) The surface impoundment is used solely for emergencies.

R315-264-230. Special Requirements for Incompatible Wastes.

Incompatible wastes, or incompatible wastes and materials, see appendix V of Rule R315-264 for examples, shall not be placed in the same surface impoundment, unless Subsection R315-264-17(b) is complied with.

R315-264-231. Special Requirements for Hazardous Wastes F020, F021, F022, F023, F026, and F027.

(a) Hazardous Wastes F020, F021, F022, F023, F026, and F027 shall not be placed in a surface impoundment unless the owner or operator operates the surface impoundment in accordance with a management plan for these wastes that is approved by the Director pursuant to the standards set out in Subsection R315-264-231(a), and in accord with all other applicable requirements of Rule R315-264. The factors to be considered are:

(1) The volume, physical, and chemical characteristics of the wastes, including their potential to migrate through soil or to volatilize or escape into the atmosphere;

(2) The attenuative properties of underlying and surrounding soils or other materials;

(3) The mobilizing properties of other materials co-disposed with these wastes; and

(4) The effectiveness of additional treatment, design, or monitoring techniques.

(b) The Director may determine that additional design, operating, and monitoring requirements are necessary for surface impoundments managing hazardous wastes F020, F021, F022, F023, F026, and F027 in order to reduce the possibility of migration of these wastes to ground water, surface water, or

air so as to protect human health and the environment.

R315-264-232. Air Emission Standards.

The owner or operator shall manage all hazardous waste placed in a surface impoundment in accordance with the applicable requirements of Sections R315-264-1050 through 1065 and 1080 through 1090.

R315-264-250. Waste Piles -- Applicability.

(a) The regulations in Sections R315-264-250 through 254 and 256 through 259 apply to owners and operators of facilities that store or treat hazardous waste in piles, except as Section R315-264-1 provides otherwise.

(b) The regulations in Sections R315-264-250 through 254 and 256 through 259 do not apply to owners or operators of waste piles that are closed with wastes left in place. Such waste piles are subject to regulation under Sections R315-264-300 through 304, 309 and 310, and 312 through 317, Landfills.

(c) The owner or operator of any waste pile that is inside or under a structure that provides protection from precipitation so that neither run-off nor leachate is generated is not subject to regulation under Section R315-264-251 or under Sections R315-264-90 through 101, provided that:

(1) Liquids or materials containing free liquids are not placed in the pile;

(2) The pile is protected from surface water run-on by the structure or in some other manner;

(3) The pile is designed and operated to control dispersal of the waste by wind, where necessary, by means other than wetting; and

(4) The pile will not generate leachate through decomposition or other reactions.

R315-264-251. Design and Operating Requirements.

(a) A waste pile, except for an existing portion of a waste pile, shall have:

(1) A liner that is designed, constructed, and installed to prevent any migration of wastes out of the pile into the adjacent subsurface soil or ground water or surface water at any time during the active life, including the closure period, of the waste pile. The liner may be constructed of materials that may allow waste to migrate into the liner itself, but not into the adjacent subsurface soil or ground water or surface water, during the active life of the facility. The liner shall be:

(i) Constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients, including static head and external hydrogeologic forces, physical contact with the waste or leachate to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operation;

(ii) Placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression, or uplift; and

(iii) Installed to cover all surrounding earth likely to be in contact with the waste or leachate; and

(2) A leachate collection and removal system immediately above the liner that is designed, constructed, maintained, and operated to collect and remove leachate from the pile. The Director shall specify design and operating conditions in the permit to ensure that the leachate depth over the liner does not exceed 30 cm, one foot. The leachate collection and removal system shall be:

(i) Constructed of materials that are:

(A) Chemically resistant to the waste managed in the pile and the leachate expected to be generated; and

(B) Of sufficient strength and thickness to prevent collapse under the pressures exerted by overlaying wastes, waste cover materials, and by any equipment used at the pile; and

(ii) Designed and operated to function without clogging through the scheduled closure of the waste pile.

(b) The owner or operator shall be exempted from the requirements of Subsection R315-264-251(a), if the Director finds, based on a demonstration by the owner or operator, that alternate design and operating practices, together with location characteristics, will prevent the migration of any hazardous constituents, see Section R315-264-93, into the ground water or surface water at any future time. In deciding whether to grant an exemption, the Director shall consider:

- (1) The nature and quantity of the wastes;
- (2) The proposed alternate design and operation;
- (3) The hydrogeologic setting of the facility, including

attenuative capacity and thickness of the liners and soils present between the pile and ground water or surface water; and

(4) All other factors which would influence the quality and mobility of the leachate produced and the potential for it to migrate to ground water or surface water.

(c) The owner or operator of each new waste pile unit, each lateral expansion of a waste pile unit, and each replacement of an existing waste pile unit shall install two or more liners and a leachate collection and removal system above and between such liners.

(1)(i) The liner system shall include:

(A) A top liner designed and constructed of materials, e.g., a geomembrane, to prevent the migration of hazardous constituents into such liner during the active life and post-closure care period; and

(B) A composite bottom liner, consisting of at least two components. The upper component shall be designed and constructed of materials, e.g., a geomembrane, to prevent the migration of hazardous constituents into this component during the active life and post-closure care period. The lower component shall be designed and constructed of materials to minimize the migration of hazardous constituents if a breach in the upper component were to occur. The lower component shall be constructed of at least 3 feet, 91 cm, of compacted soil material with a hydraulic conductivity of no more than 1×10^{-7} cm/sec.

(ii) The liners shall comply with Subsections R315-264-251(a)(1)(i), (ii), and (iii).

(2) The leachate collection and removal system immediately above the top liner shall be designed, constructed, operated, and maintained to collect and remove leachate from the waste pile during the active life and post-closure care period. The Director shall specify design and operating conditions in the permit to ensure that the leachate depth over the liner does not exceed 30 cm, one foot. The leachate collection and removal system shall comply with Subsections R315-264-251(c)(3)(iii) and (iv).

(3) The leachate collection and removal system between the liners, and immediately above the bottom composite liner in the case of multiple leachate collection and removal systems, is also a leak detection system. This leak detection system shall be capable of detecting, collecting, and removing leaks of hazardous constituents at the earliest practicable time through all areas of the top liner likely to be exposed to waste or leachate during the active life and post-closure care period. The requirements for a leak detection system in Subsection R315-264-251(c) are satisfied by installation of a system that is, at a minimum:

(i) Constructed with a bottom slope of one percent or more;

(ii) Constructed of granular drainage materials with a hydraulic conductivity of 1×10^{-2} cm/sec or more and a thickness of 12 inches, 30.5 cm, or more; or constructed of synthetic or geonet drainage materials with a transmissivity of 3×10^{-5} m²/sec or more;

(iii) Constructed of materials that are chemically resistant

to the waste managed in the waste pile and the leachate expected to be generated, and of sufficient strength and thickness to prevent collapse under the pressures exerted by overlying wastes, waste cover materials, and equipment used at the waste pile;

(iv) Designed and operated to minimize clogging during the active life and post-closure care period; and

(v) Constructed with sumps and liquid removal methods, e.g., pumps, of sufficient size to collect and remove liquids from the sump and prevent liquids from backing up into the drainage layer. Each unit shall have its own sump(s). The design of each sump and removal system shall provide a method for measuring and recording the volume of liquids present in the sump and of liquids removed.

(4) The owner or operator shall collect and remove pumpable liquids in the leak detection system sumps to minimize the head on the bottom liner.

(5) The owner or operator of a leak detection system that is not located completely above the seasonal high water table shall demonstrate that the operation of the leak detection system will not be adversely affected by the presence of ground water.

(d) The Director may approve alternative design or operating practices to those specified in Subsection R315-264-251(c) if the owner or operator demonstrates to the Director that such design and operating practices, together with location characteristics:

(1) Will prevent the migration of any hazardous constituent into the ground water or surface water at least as effectively as the liners and leachate collection and removal systems specified in Subsection R315-264-251(c); and

(2) Will allow detection of leaks of hazardous constituents through the top liner at least as effectively.

(e) Subsection R315-264-251(c) does not apply to monofills that are granted a waiver by the Director in accordance with Section R315-264-221(e).

(f) The owner or operator of any replacement waste pile unit is exempt from Subsection R315-264-251(c) if:

(1) The existing unit was constructed in compliance with the design standards of section 3004(o)(1)(A)(i) and 3004(o)(5) of the Resource Conservation and Recovery Act; and

(2) There is no reason to believe that the liner is not functioning as designed.

(g) The owner or operator shall design, construct, operate, and maintain a run-on control system capable of preventing flow onto the active portion of the pile during peak discharge from at least a 25-year storm.

(h) The owner or operator shall design, construct, operate, and maintain a run-off management system to collect and control at least the water volume resulting from a 24-hour, 25-year storm.

(i) Collection and holding facilities, e.g., tanks or basins, associated with run-on and run-off control systems shall be emptied or otherwise managed expeditiously after storms to maintain design capacity of the system.

(j) If the pile contains any particulate matter which may be subject to wind dispersal, the owner or operator shall cover or otherwise manage the pile to control wind dispersal.

(k) The Director shall specify in the permit all design and operating practices that are necessary to ensure that the requirements of Section R315-264-251 are satisfied.

R315-264-252. Action Leakage Rate.

(a) The Director shall approve an action leakage rate for waste pile units subject to Subsections R315-264-251(c) or (d). The action leakage rate is the maximum design flow rate that the leak detection system can remove without the fluid head on the bottom liner exceeding one foot. The action leakage rate shall include an adequate safety margin to allow for uncertainties in the design, e.g., slope, hydraulic conductivity, thickness of

drainage material, construction, operation, and location of the leak detection system, waste and leachate characteristics, likelihood and amounts of other sources of liquids in the leak detection system, and proposed response actions, e.g., the action leakage rate shall consider decreases in the flow capacity of the system over time resulting from siltation and clogging, rib layover and creep of synthetic components of the system, overburden pressures, etc.

(b) To determine if the action leakage rate has been exceeded, the owner or operator shall convert the weekly flow rate from the monitoring data obtained under Subsection R315-264-254(c) to an average daily flow rate, gallons per acre per day, for each sump. Unless the Director approves a different calculation, the average daily flow rate for each sump shall be calculated weekly during the active life and closure period.

R315-264-253. Response Actions.

(a) The owner or operator of waste pile units subject to Subsections R315-264-251(c) or (d) shall have an approved response action plan before receipt of waste. The response action plan shall set forth the actions to be taken if the action leakage rate has been exceeded. At a minimum, the response action plan shall describe the actions specified in Subsection R315-264-253(b).

(b) If the flow rate into the leak detection system exceeds the action leakage rate for any sump, the owner or operator shall:

(1) Notify the Director in writing of the exceedance within 7 days of the determination;

(2) Submit a preliminary written assessment to the Director within 14 days of the determination, as to the amount of liquids, likely sources of liquids, possible location, size, and cause of any leaks, and short-term actions taken and planned;

(3) Determine to the extent practicable the location, size, and cause of any leak;

(4) Determine whether waste receipt should cease or be curtailed, whether any waste should be removed from the unit for inspection, repairs, or controls, and whether or not the unit should be closed;

(5) Determine any other short-term and long-term actions to be taken to mitigate or stop any leaks; and

(6) Within 30 days after the notification that the action leakage rate has been exceeded, submit to the Director the results of the analyses specified in Subsections R315-264-253(b)(3), (4), and (5), the results of actions taken, and actions planned. Monthly thereafter, as long as the flow rate in the leak detection system exceeds the action leakage rate, the owner or operator shall submit to the Director a report summarizing the results of any remedial actions taken and actions planned.

(c) To make the leak and/or remediation determinations in Subsections R315-264-253(b)(3), (4), and (5), the owner or operator shall:

(1)(i) Assess the source of liquids and amounts of liquids by source,

(ii) Conduct a fingerprint, hazardous constituent, or other analyses of the liquids in the leak detection system to identify the source of liquids and possible location of any leaks, and the hazard and mobility of the liquid; and

(iii) Assess the seriousness of any leaks in terms of potential for escaping into the environment; or

(2) Document why such assessments are not needed.

R315-264-254. Monitoring and Inspection.

(a) During construction or installation, liners, except in the case of existing portions of piles exempt from Subsection R315-264-251(a), and cover systems, e.g., membranes, sheets, or coatings, shall be inspected for uniformity, damage, and imperfections, e.g., holes, cracks, thin spots, or foreign materials. Immediately after construction or installation:

(1) Synthetic liners and covers shall be inspected to ensure tight seams and joints and the absence of tears, punctures, or blisters; and

(2) Soil-based and admixed liners and covers shall be inspected for imperfections including lenses, cracks, channels, root holes, or other structural non-uniformities that may cause an increase in the permeability of the liner or cover.

(b) While a waste pile is in operation, it shall be inspected weekly and after storms to detect evidence of any of the following:

(1) Deterioration, malfunctions, or improper operation of run-on and run-off control systems;

(2) Proper functioning of wind dispersal control systems, where present; and

(3) The presence of leachate in and proper functioning of leachate collection and removal systems, where present.

(c) An owner or operator required to have a leak detection system under Subsection R315-264-251(c) shall record the amount of liquids removed from each leak detection system sump at least once each week during the active life and closure period.

R315-264-256. Special Requirements for Ignitable or Reactive Waste.

Ignitable or reactive waste shall not be placed in a waste pile unless the waste and waste pile satisfy all applicable requirements of Rule R315-268, and:

(a) The waste is treated, rendered, or mixed before or immediately after placement in the pile so that:

(1) The resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive waste under Sections R315-261-21 or 23; and

(2) Subsection R315-264-17(b) is complied with; or

(b) The waste is managed in such a way that it is protected from any material or conditions which may cause it to ignite or react.

R315-264-257. Special Requirements for Incompatible Wastes.

(a) Incompatible wastes, or incompatible wastes and materials, see appendix V of Rule R315-264 for examples, shall not be placed in the same pile, unless Subsection R315-264-17(b) is complied with.

(b) A pile of hazardous waste that is incompatible with any waste or other material stored nearby in containers, other piles, open tanks, or surface impoundments shall be separated from the other materials, or protected from them by means of a dike, berm, wall, or other device.

(c) Hazardous waste shall not be piled on the same base where incompatible wastes or materials were previously piled, unless the base has been decontaminated sufficiently to ensure compliance with Subsection R315-264-17(b).

R315-264-258. Closure and Post-Closure Care.

(a) At closure, the owner or operator shall remove or decontaminate all waste residues, contaminated containment system components, liners, etc., contaminated subsoils, and structures and equipment contaminated with waste and leachate, and manage them as hazardous waste unless Subsection R315-261-3(d) applies.

(b) If, after removing or decontaminating all residues and making all reasonable efforts to effect removal or decontamination of contaminated components, subsoils, structures, and equipment as required in Subsection R315-264-258(a), the owner or operator finds that not all contaminated subsoils can be practicably removed or decontaminated, he shall close the facility and perform post-closure care in accordance with the closure and post-closure care requirements that apply to landfills, Section R315-264-310.

(c)(1) The owner or operator of a waste pile that does not comply with the liner requirements of Subsection R315-264-251(a)(1) and is not exempt from them in accordance with Subsections R315-264-250(c) or 251(b), shall:

(i) Include in the closure plan for the pile under Section R315-264-112 both a plan for complying with Subsection R315-264-258(a) and a contingent plan for complying with Subsection R315-264-258(b) in case not all contaminated subsoils can be practicably removed at closure; and

(ii) Prepare a contingent post-closure plan under Section R315-264-118 for complying with Subsection R315-264-258(b) in case not all contaminated subsoils can be practicably removed at closure.

(2) The cost estimates calculated under Sections R315-264-142 and 144 for closure and post-closure care of a pile subject to this Subsection R315-264-258(c) shall include the cost of complying with the contingent closure plan and the contingent post-closure plan, but are not required to include the cost of expected closure under Subsection R315-264-258(a).

R315-264-259. Special Requirements for Hazardous Wastes F020, F021, F022, F023, F026, and F027.

(a) Hazardous Wastes F020, F021, F022, F023, F026, and F027 shall not be placed in waste piles that are not enclosed, as defined in Subsection R315-264-250(c), unless the owner or operator operates the waste pile in accordance with a management plan for these wastes that is approved by the Director pursuant to the standards set out in Subsection R315-264-259(a), and in accord with all other applicable requirements of Rule R315-264. The factors to be considered are:

(1) The volume, physical, and chemical characteristics of the wastes, including their potential to migrate through soil or to volatilize or escape into the atmosphere;

(2) The attenuative properties of underlying and surrounding soils or other materials;

(3) The mobilizing properties of other materials co-disposed with these wastes; and

(4) The effectiveness of additional treatment, design, or monitoring techniques.

(b) The Director may determine that additional design, operating, and monitoring requirements are necessary for piles managing hazardous wastes F020, F021, F022, F023, F026, and F027 in order to reduce the possibility of migration of these wastes to ground water, surface water, or air so as to protect human health and the environment.

R315-264-270. Land Treatment -- Applicability.

The regulations in Sections R315-264-270 through 283 apply to owners and operators of facilities that treat or dispose of hazardous waste in land treatment units, except as Section R315-264-1 provides otherwise.

R315-264-271. Treatment Program.

(a) An owner or operator subject to Sections R315-264-270 through 283 shall establish a land treatment program that is designed to ensure that hazardous constituents placed in or on the treatment zone are degraded, transformed, or immobilized within the treatment zone. The Director shall specify in the facility permit the elements of the treatment program, including:

(1) The wastes that are capable of being treated at the unit based on a demonstration under Section R315-264-272;

(2) Design measures and operating practices necessary to maximize the success of degradation, transformation, and immobilization processes in the treatment zone in accordance with Subsection R315-264-273(a); and

(3) Unsaturated zone monitoring provisions meeting the requirements of Section R315-264-278.

(b) The Director shall specify in the facility permit the hazardous constituents that shall be degraded, transformed, or

immobilized under Sections R315-264-270 through 283. Hazardous constituents are constituents identified in appendix VIII of Rule R315-261 that are reasonably expected to be in, or derived from, waste placed in or on the treatment zone.

(c) The Director shall specify the vertical and horizontal dimensions of the treatment zone in the facility permit. The treatment zone is the portion of the unsaturated zone below and including the land surface in which the owner or operator intends to maintain the conditions necessary for effective degradation, transformation, or immobilization of hazardous constituents. The maximum depth of the treatment zone shall be:

(1) No more than 1.5 meters, 5 feet, from the initial soil surface; and

(2) More than 1 meter, 3 feet, above the seasonal high water table.

R315-264-272. Treatment Demonstration.

(a) For each waste that will be applied to the treatment zone, the owner or operator shall demonstrate, prior to application of the waste, that hazardous constituents in the waste can be completely degraded, transformed, or immobilized in the treatment zone.

(b) In making this demonstration, the owner or operator may use field tests, laboratory analyses, available data, or, in the case of existing units, operating data. If the owner or operator intends to conduct field tests or laboratory analyses in order to make the demonstration required under Subsection R315-264-272(a), he shall obtain a treatment or disposal permit under Section R315-270-63. The Director shall specify in this permit the testing, analytical, design, and operating requirements, including the duration of the tests and analyses, and, in the case of field tests, the horizontal and vertical dimensions of the treatment zone, monitoring procedures, closure and clean-up activities, necessary to meet the requirements in Subsection R315-264-272(c).

(c) Any field test or laboratory analysis conducted in order to make a demonstration under Subsection R315-264-272(a) shall:

(1) Accurately simulate the characteristics and operating conditions for the proposed land treatment unit including:

(i) The characteristics of the waste, including the presence of appendix VIII of Rule R315-261 constituents;

(ii) The climate in the area;

(iii) The topography of the surrounding area;

(iv) The characteristics of the soil in the treatment zone, including depth; and

(v) The operating practices to be used at the unit.

(2) Be likely to show that hazardous constituents in the waste to be tested will be completely degraded, transformed, or immobilized in the treatment zone of the proposed land treatment unit; and

(3) Be conducted in a manner that protects human health and the environment considering:

(i) The characteristics of the waste to be tested;

(ii) The operating and monitoring measures taken during the course of the test;

(iii) The duration of the test;

(iv) The volume of waste used in the test;

(v) In the case of field tests, the potential for migration of hazardous constituents to ground water or surface water.

R315-264-273. Design and Operating Requirements.

The Director shall specify in the facility permit how the owner or operator will design, construct, operate, and maintain the land treatment unit in compliance with Section R315-264-273.

(a) The owner or operator shall design, construct, operate, and maintain the unit to maximize the degradation,

transformation, and immobilization of hazardous constituents in the treatment zone. The owner or operator shall design, construct, operate, and maintain the unit in accord with all design and operating conditions that were used in the treatment demonstration under Section R315-264-272. At a minimum, the Director shall specify the following in the facility permit:

- (1) The rate and method of waste application to the treatment zone;
 - (2) Measures to control soil pH;
 - (3) Measures to enhance microbial or chemical reactions, e.g., fertilization, tilling; and
 - (4) Measures to control the moisture content of the treatment zone.
- (b) The owner or operator shall design, construct, operate, and maintain the treatment zone to minimize run-off of hazardous constituents during the active life of the land treatment unit.
- (c) The owner or operator shall design, construct, operate, and maintain a run-on control system capable of preventing flow onto the treatment zone during peak discharge from at least a 25-year storm.
- (d) The owner or operator shall design, construct, operate, and maintain a run-off management system to collect and control at least the water volume resulting from a 24-hour, 25-year storm.
- (e) Collection and holding facilities, e.g., tanks or basins, associated with run-on and run-off control systems shall be emptied or otherwise managed expeditiously after storms to maintain the design capacity of the system.
- (f) If the treatment zone contains particulate matter which may be subject to wind dispersal, the owner or operator shall manage the unit to control wind dispersal.
- (g) The owner or operator shall inspect the unit weekly and after storms to detect evidence of:
- (1) Deterioration, malfunctions, or improper operation of run-on and run-off control systems; and
 - (2) Improper functioning of wind dispersal control measures.

R315-264-276. Food-Chain Crops.

The Director may allow the growth of food-chain crops in or on the treatment zone only if the owner or operator satisfies the conditions of Section R315-264-276. The Director shall specify in the facility permit the specific food-chain crops which may be grown.

- (a)(1) The owner or operator shall demonstrate that there is no substantial risk to human health caused by the growth of such crops in or on the treatment zone by demonstrating, prior to the planting of such crops, that hazardous constituents other than cadmium:
- (i) Will not be transferred to the food or feed portions of the crop by plant uptake or direct contact, and will not otherwise be ingested by food-chain animals, e.g., by grazing; or
 - (ii) Will not occur in greater concentrations in or on the food or feed portions of crops grown on the treatment zone than in or on identical portions of the same crops grown on untreated soils under similar conditions in the same region.
- (2) The owner or operator shall make the demonstration required under Subsection R315-264-276(a) prior to the planting of crops at the facility for all constituents identified in appendix VIII of Rule R315-261 that are reasonably expected to be in, or derived from, waste placed in or on the treatment zone.
- (3) In making a demonstration under Subsection R315-264-276(a), the owner or operator may use field tests, greenhouse studies, available data, or, in the case of existing units, operating data, and shall:
- (i) Base the demonstration on conditions similar to those present in the treatment zone, including soil characteristics, e.g.,

pH, cation exchange capacity, specific wastes, application rates, application methods, and crops to be grown; and

(ii) Describe the procedures used in conducting any tests, including the sample selection criteria, sample size, analytical methods, and statistical procedures.

(4) If the owner or operator intends to conduct field tests or greenhouse studies in order to make the demonstration required under Subsection R315-264-276(a), he shall obtain a permit for conducting such activities.

(b) The owner or operator shall comply with the following conditions if cadmium is contained in wastes applied to the treatment zone:

(1)(i) The pH of the waste and soil mixture shall be 6.5 or greater at the time of each waste application, except for waste containing cadmium at concentrations of 2 mg/kg, dry weight, or less;

(ii) The annual application of cadmium from waste shall not exceed 0.5 kilograms per hectare, kg/ha, on land used for tobacco, leafy vegetables, or root crops grown for human consumption or any other food-chain crop;

(iii) The cumulative application of cadmium from waste shall not exceed 5 kg/ha if the waste and soil mixture has a pH of less than 6.5; and

(iv) If the waste and soil mixture has a pH of 6.5 or greater or is maintained at a pH of 6.5 or greater during crop growth, the cumulative application of cadmium from waste shall not exceed: 5 kg/ha if soil cation exchange capacity (CEC) is less than 5 meq/100g; 10 kg/ha if soil CEC is 5-15 meq/100g; and 20 kg/ha if soil CEC is greater than 15 meq/100g; or

(2)(i) Animal feed shall be the only food-chain crop produced;

(ii) The pH of the waste and soil mixture shall be 6.5 or greater at the time of waste application or at the time the crop is planted, whichever occurs later, and this pH level shall be maintained whenever food-chain crops are grown;

(iii) There shall be an operating plan which demonstrates how the animal feed will be distributed to preclude ingestion by humans. The operating plan shall describe the measures to be taken to safeguard against possible health hazards from cadmium entering the food chain, which may result from alternative land uses; and

(iv) Future property owners shall be notified by a stipulation in the land record or property deed which states that the property has received waste at high cadmium application rates and that food-chain crops shall not be grown except in compliance with Subsection R315-264-276(b)(2).

R315-264-278. Unsaturated Zone Monitoring.

An owner or operator subject to Sections R315-270 through 283 shall establish an unsaturated zone monitoring program to discharge the following responsibilities:

(a) The owner or operator shall monitor the soil and soil-pore liquid to determine whether hazardous constituents migrate out of the treatment zone.

(1) The Director shall specify the hazardous constituents to be monitored in the facility permit. The hazardous constituents to be monitored are those specified under Section R315-264-271(b).

(2) The Director may require monitoring for principal hazardous constituents (PHCs) in lieu of the constituents specified under Section R315-264-271(b). PHCs are hazardous constituents contained in the wastes to be applied at the unit that are the most difficult to treat, considering the combined effects of degradation, transformation, and immobilization. The Director shall establish PHCs if he finds, based on waste analyses, treatment demonstrations, or other data, that effective degradation, transformation, or immobilization of the PHCs will assure treatment at at least equivalent levels for the other hazardous constituents in the wastes.

(b) The owner or operator shall install an unsaturated zone monitoring system that includes soil monitoring using soil cores and soil-pore liquid monitoring using devices such as lysimeters. The unsaturated zone monitoring system shall consist of a sufficient number of sampling points at appropriate locations and depths to yield samples that:

(1) Represent the quality of background soil-pore liquid quality and the chemical make-up of soil that has not been affected by leakage from the treatment zone; and

(2) Indicate the quality of soil-pore liquid and the chemical make-up of the soil below the treatment zone.

(c) The owner or operator shall establish a background value for each hazardous constituent to be monitored under Subsection R315-264-278(a). The permit shall specify the background values for each constituent or specify the procedures to be used to calculate the background values.

(1) Background soil values may be based on a one-time sampling at a background plot having characteristics similar to those of the treatment zone.

(2) Background soil-pore liquid values shall be based on at least quarterly sampling for one year at a background plot having characteristics similar to those of the treatment zone.

(3) The owner or operator shall express all background values in a form necessary for the determination of statistically significant increases under Subsection R315-264-278(f).

(4) In taking samples used in the determination of all background values, the owner or operator shall use an unsaturated zone monitoring system that complies with Subsection R315-264-278(b)(1).

(d) The owner or operator shall conduct soil monitoring and soil-pore liquid monitoring immediately below the treatment zone. The Director shall specify the frequency and timing of soil and soil-pore liquid monitoring in the facility permit after considering the frequency, timing, and rate of waste application, and the soil permeability. The owner or operator shall express the results of soil and soil-pore liquid monitoring in a form necessary for the determination of statistically significant increases under Subsection R315-264-278(f).

(e) The owner or operator shall use consistent sampling and analysis procedures that are designed to ensure sampling results that provide a reliable indication of soil-pore liquid quality and the chemical make-up of the soil below the treatment zone. At a minimum, the owner or operator shall implement procedures and techniques for:

- (1) Sample collection;
- (2) Sample preservation and shipment;
- (3) Analytical procedures; and
- (4) Chain of custody control.

(f) The owner or operator shall determine whether there is a statistically significant change over background values for any hazardous constituent to be monitored under Subsection R315-264-278(a) below the treatment zone each time he conducts soil monitoring and soil-pore liquid monitoring under Subsection R315-264-278(d).

(1) In determining whether a statistically significant increase has occurred, the owner or operator shall compare the value of each constituent, as determined under Subsection R315-264-278(d), to the background value for that constituent according to the statistical procedure specified in the facility permit under Subsection R315-264-278(e).

(2) The owner or operator shall determine whether there has been a statistically significant increase below the treatment zone within a reasonable time period after completion of sampling. The Director shall specify that time period in the facility permit after considering the complexity of the statistical test and the availability of laboratory facilities to perform the analysis of soil and soil-pore liquid samples.

(3) The owner or operator shall determine whether there is a statistically significant increase below the treatment zone using

a statistical procedure that provides reasonable confidence that migration from the treatment zone will be identified. The Director shall specify a statistical procedure in the facility permit that he finds:

(i) Is appropriate for the distribution of the data used to establish background values; and

(ii) Provides a reasonable balance between the probability of falsely identifying migration from the treatment zone and the probability of failing to identify real migration from the treatment zone.

(g) If the owner or operator determines, pursuant to Subsection R315-264-278(f), that there is a statistically significant increase of hazardous constituents below the treatment zone, he shall:

(1) Notify the Director of this finding in writing within seven days. The notification shall indicate what constituents have shown statistically significant increases.

(2) Within 90 days, submit to the Director an application for a permit modification to modify the operating practices at the facility in order to maximize the success of degradation, transformation, or immobilization processes in the treatment zone.

(h) If the owner or operator determines, pursuant to Subsection R315-264-278(f), that there is a statistically significant increase of hazardous constituents below the treatment zone, he may demonstrate that a source other than regulated units caused the increase or that the increase resulted from an error in sampling, analysis, or evaluation. While the owner or operator may make a demonstration under Subsection R315-264-278(h) in addition to, or in lieu of, submitting a permit modification application under Subsection R315-264-278(g)(2), he is not relieved of the requirement to submit a permit modification application within the time specified in Subsection R315-264-278(g)(2) unless the demonstration made under Subsection R315-264-278(h) successfully shows that a source other than regulated units caused the increase or that the increase resulted from an error in sampling, analysis, or evaluation. In making a demonstration under Subsection R315-264-278(h), the owner or operator shall:

(1) Notify the Director in writing within seven days of determining a statistically significant increase below the treatment zone that he intends to make a determination under Subsection R315-264-278(h);

(2) Within 90 days, submit a report to the Director demonstrating that a source other than the regulated units caused the increase or that the increase resulted from error in sampling, analysis, or evaluation;

(3) Within 90 days, submit to the Director an application for a permit modification to make any appropriate changes to the unsaturated zone monitoring program at the facility; and

(4) Continue to monitor in accordance with the unsaturated zone monitoring program established under Section R315-264-278.

R315-264-279. Recordkeeping.

The owner or operator shall include hazardous waste application dates and rates in the operating record required under Section R315-264-73.

R315-264-280. Closure and Post-Closure Care.

(a) During the closure period the owner or operator shall:

(1) Continue all operations, including pH control, necessary to maximize degradation, transformation, or immobilization of hazardous constituents within the treatment zone as required under Subsection R315-264-273(a), except to the extent such measures are inconsistent with Subsection R315-264-280(a)(8).

(2) Continue all operations in the treatment zone to minimize run-off of hazardous constituents as required under

Subsection R315-264-273(b);

(3) Maintain the run-on control system required under Subsection R315-264-273(c);

(4) Maintain the run-off management system required under Subsection R315-264-273(d);

(5) Control wind dispersal of hazardous waste if required under Subsection R315-264-273(f);

(6) Continue to comply with any prohibitions or conditions concerning growth of food-chain crops under Section R315-264-276;

(7) Continue unsaturated zone monitoring in compliance with Section R315-264-278, except that soil-pore liquid monitoring may be terminated 90 days after the last application of waste to the treatment zone; and

(8) Establish a vegetative cover on the portion of the facility being closed at such time that the cover will not substantially impede degradation, transformation, or immobilization of hazardous constituents in the treatment zone. The vegetative cover shall be capable of maintaining growth without extensive maintenance.

(b) For the purpose of complying with Section R315-264-115, when closure is completed the owner or operator may submit to the Director certification by an independent, qualified soil scientist, in lieu of a qualified Professional Engineer, that the facility has been closed in accordance with the specifications in the approved closure plan.

(c) During the post-closure care period the owner or operator shall:

(1) Continue all operations, including pH control, necessary to enhance degradation and transformation and sustain immobilization of hazardous constituents in the treatment zone to the extent that such measures are consistent with other post-closure care activities;

(2) Maintain a vegetative cover over closed portions of the facility;

(3) Maintain the run-on control system required under Subsection R315-264-273(c);

(4) Maintain the run-off management system required under Subsection R315-264-273(d);

(5) Control wind dispersal of hazardous waste if required under Subsection R315-264-273(f);

(6) Continue to comply with any prohibitions or conditions concerning growth of food-chain crops under Section R315-264-276; and

(7) Continue unsaturated zone monitoring in compliance with Section R315-264-278, except that soil-pore liquid monitoring may be terminated 90 days after the last application of waste to the treatment zone.

(d) The owner or operator is not subject to regulation under Subsections R315-264-280(a)(8) and (c) if the Director finds that the level of hazardous constituents in the treatment zone soil does not exceed the background value of those constituents by an amount that is statistically significant when using the test specified in Subsection R315-264-280(d)(3). The owner or operator may submit such a demonstration to the Director at any time during the closure or post-closure care periods. For the purposes of Subsection R315-264-280(d):

(1) The owner or operator shall establish background soil values and determine whether there is a statistically significant increase over those values for all hazardous constituents specified in the facility permit under Subsection R315-264-271(b).

(i) Background soil values may be based on a one-time sampling of a background plot having characteristics similar to those of the treatment zone.

(ii) The owner or operator shall express background values and values for hazardous constituents in the treatment zone in a form necessary for the determination of statistically significant increases under Subsection R315-264-280(d)(3).

(2) In taking samples used in the determination of background and treatment zone values, the owner or operator shall take samples at a sufficient number of sampling points and at appropriate locations and depths to yield samples that represent the chemical make-up of soil that has not been affected by leakage from the treatment zone and the soil within the treatment zone, respectively.

(3) In determining whether a statistically significant increase has occurred, the owner or operator shall compare the value of each constituent in the treatment zone to the background value for that constituent using a statistical procedure that provides reasonable confidence that constituent presence in the treatment zone will be identified. The owner or operator shall use a statistical procedure that:

(i) Is appropriate for the distribution of the data used to establish background values; and

(ii) Provides a reasonable balance between the probability of falsely identifying hazardous constituent presence in the treatment zone and the probability of failing to identify real presence in the treatment zone.

(e) The owner or operator is not subject to regulation under Sections R315-264-90 through 101 if the Director finds that the owner or operator satisfies Subsection R315-264-280(d) and if unsaturated zone monitoring under Section R315-264-278 indicates that hazardous constituents have not migrated beyond the treatment zone during the active life of the land treatment unit.

R315-264-281. Special Requirements for Ignitable or Reactive Waste.

The owner or operator shall not apply ignitable or reactive waste to the treatment zone unless the waste and the treatment zone meet all applicable requirements of Rule R315-268, and:

(a) The waste is immediately incorporated into the soil so that:

(1) The resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive waste under Sections R315-261-21 or 23; and

(2) Subsection R315-264-17(b) is complied with; or

(b) The waste is managed in such a way that it is protected from any material or conditions which may cause it to ignite or react.

R315-264-282. Special Requirements for Incompatible Wastes.

The owner or operator shall not place incompatible wastes, or incompatible wastes and materials, see appendix V of Rule R315-264 for examples, in or on the same treatment zone, unless Subsection R315-264-17(b) is complied with.

R315-264-283. Special Requirements for Hazardous Wastes F020, F021, F022, F023, F026, and F027.

(a) Hazardous Wastes F020, F021, F022, F023, F026, and F027 shall not be placed in a land treatment unit unless the owner or operator operates the facility in accordance with a management plan for these wastes that is approved by the Director pursuant to the standards set out in Subsection R315-264-283(a), and in accord with all other applicable requirements of Rule R315-264. The factors to be considered are:

(1) The volume, physical, and chemical characteristics of the wastes, including their potential to migrate through soil or to volatilize or escape into the atmosphere;

(2) The attenuative properties of underlying and surrounding soils or other materials;

(3) The mobilizing properties of other materials co-disposed with these wastes; and

(4) The effectiveness of additional treatment, design, or monitoring techniques.

(b) The Director may determine that additional design,

operating, and monitoring requirements are necessary for land treatment facilities managing hazardous wastes F020, F021, F022, F023, F026, and F027 in order to reduce the possibility of migration of these wastes to ground water, surface water, or air so as to protect human health and the environment.

R315-264-300. Landfills -- Applicability.

The regulations in Sections R315-264-300 through 317 apply to owners and operators of facilities that dispose of hazardous waste in landfills, except as Section R315-264-1 provides otherwise.

R315-264-301. Design and Operating Requirements.

(a) Any landfill that is not covered by Subsection R315-264-301(c) or 40 CFR 265.301(a), which is adopted by reference, shall have a liner system for all portions of the landfill, except for portions of such landfill that existed on or prior to October 10, 1984. The liner system shall have:

(1) A liner that is designed, constructed, and installed to prevent any migration of wastes out of the landfill to the adjacent subsurface soil or ground water or surface water at anytime during the active life, including the closure period, of the landfill. The liner shall be constructed of materials that prevent wastes from passing into the liner during the active life of the facility. The liner shall be:

(i) Constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients, including static head and external hydrogeologic forces, physical contact with the waste or leachate to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operation;

(ii) Placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression, or uplift; and

(iii) Installed to cover all surrounding earth likely to be in contact with the waste or leachate; and

(2) A leachate collection and removal system immediately above the liner that is designed, constructed, maintained, and operated to collect and remove leachate from the landfill. The Director shall specify design and operating conditions in the permit to ensure that the leachate depth over the liner does not exceed 30 cm, one foot. The leachate collection and removal system shall be:

(i) Constructed of materials that are:

(A) Chemically resistant to the waste managed in the landfill and the leachate expected to be generated; and

(B) Of sufficient strength and thickness to prevent collapse under the pressures exerted by overlying wastes, waste cover materials, and by any equipment used at the landfill; and

(ii) Designed and operated to function without clogging through the scheduled closure of the landfill.

(b) The owner or operator shall be exempted from the requirements of Subsection R315-264-301(a) if the Director finds, based on a demonstration by the owner or operator, that alternative design and operating practices, together with location characteristics, will prevent the migration of any hazardous constituents, see Section R315-264-93, into the ground water or surface water at any future time. In deciding whether to grant an exemption, the Director shall consider:

(1) The nature and quantity of the wastes;

(2) The proposed alternate design and operation;

(3) The hydrogeologic setting of the facility, including the attenuative capacity and thickness of the liners and soils present between the landfill and ground water or surface water; and

(4) All other factors which would influence the quality and mobility of the leachate produced and the potential for it to migrate to ground water or surface water.

(c) The owner or operator of each new landfill unit on

which construction commences after January 29, 1992, each lateral expansion of a landfill unit on which construction commences after July 29, 1992, and each replacement of an existing landfill unit that is to commence reuse after July 29, 1992 shall install two or more liners and a leachate collection and removal system above and between such liners. "Construction commences" is as defined in Section R315-260-10 under "existing facility".

(1)(i) The liner system shall include:

(A) A top liner designed and constructed of materials, e.g., a geomembrane, to prevent the migration of hazardous constituents into such liner during the active life and post-closure care period; and

(B) A composite bottom liner, consisting of at least two components. The upper component shall be designed and constructed of materials, e.g., a geomembrane, to prevent the migration of hazardous constituents into this component during the active life and post-closure care period. The lower component shall be designed and constructed of materials to minimize the migration of hazardous constituents if a breach in the upper component were to occur. The lower component shall be constructed of at least 91 cm, 3 feet, of compacted soil material with a hydraulic conductivity of no more than 1×10^{-7} cm/sec.

(ii) The liners shall comply with Subsections R315-264-301(a)(1)(i), (ii), and (iii).

(2) The leachate collection and removal system immediately above the top liner shall be designed, constructed, operated, and maintained to collect and remove leachate from the landfill during the active life and post-closure care period. The Director shall specify design and operating conditions in the permit to ensure that the leachate depth over the liner does not exceed 30 cm, one foot. The leachate collection and removal system shall comply with Subsections R315-264-301(c)(3)(iii) and (iv).

(3) The leachate collection and removal system between the liners, and immediately above the bottom composite liner in the case of multiple leachate collection and removal systems, is also a leak detection system. This leak detection system shall be capable of detecting, collecting, and removing leaks of hazardous constituents at the earliest practicable time through all areas of the top liner likely to be exposed to waste or leachate during the active life and post-closure care period. The requirements for a leak detection system in Subsection R315-264-301(c) are satisfied by installation of a system that is, at a minimum:

(i) Constructed with a bottom slope of one percent or more;

(ii) Constructed of granular drainage materials with a hydraulic conductivity of 1×10^{-2} cm/sec or more and a thickness of 30.5 cm, 12 inches, or more; or constructed of synthetic or geonet drainage materials with a transmissivity of 3×10^{-5} m²/sec or more;

(iii) Constructed of materials that are chemically resistant to the waste managed in the landfill and the leachate expected to be generated, and of sufficient strength and thickness to prevent collapse under the pressures exerted by overlying wastes, waste cover materials, and equipment used at the landfill;

(iv) Designed and operated to minimize clogging during the active life and post-closure care period; and

(v) Constructed with sumps and liquid removal methods, e.g., pumps, of sufficient size to collect and remove liquids from the sump and prevent liquids from backing up into the drainage layer. Each unit shall have its own sump(s). The design of each sump and removal system shall provide a method for measuring and recording the volume of liquids present in the sump and of liquids removed.

(4) The owner or operator shall collect and remove

pumpable liquids in the leak detection system sumps to minimize the head on the bottom liner.

(5) The owner or operator of a leak detection system that is not located completely above the seasonal high water table shall demonstrate that the operation of the leak detection system will not be adversely affected by the presence of ground water.

(d) The Director may approve alternative design or operating practices to those specified in Subsection R315-264-301(c) if the owner or operator demonstrates to the Director that such design and operating practices, together with location characteristics:

(1) Will prevent the migration of any hazardous constituent into the ground water or surface water at least as effectively as the liners and leachate collection and removal systems specified in Subsection R315-264-301(c); and

(2) Will allow detection of leaks of hazardous constituents through the top liner at least as effectively.

(e) The double liner requirement set forth in Subsection R315-264-301(c) may be waived by the Director for any monofill, if:

(1) The monofill contains only hazardous wastes from foundry furnace emission controls or metal casting molding sand, and such wastes do not contain constituents which would render the wastes hazardous for reasons other than the Toxicity Characteristic in Section R315-261-24, with EPA Hazardous Waste Numbers D004 through D017; and

(2)(i)(A) The monofill has at least one liner for which there is no evidence that such liner is leaking;

(B) The monofill is located more than one-quarter mile from an "underground source of drinking water," as that term is defined in Section R315-270-2; and

(C) The monofill is in compliance with generally applicable ground-water monitoring requirements for facilities with permits under Section 19-6-108; or

(ii) The owner or operator demonstrates that the monofill is located, designed and operated so as to assure that there will be no migration of any hazardous constituent into ground water or surface water at any future time.

(f) The owner or operator of any replacement landfill unit is exempt from Subsection R315-264-301(c) if:

(1) The existing unit was constructed in compliance with the design standards of section 3004(o)(1)(A)(i) and (o)(5) of the Resource Conservation and Recovery Act; and

(2) There is no reason to believe that the liner is not functioning as designed.

(g) The owner or operator shall design, construct, operate, and maintain a run-on control system capable of preventing flow onto the active portion of the landfill during peak discharge from at least a 24-hour, 25-year storm.

(h) The owner or operator shall design, construct, operate, and maintain a run-off management system to collect and control at least the water volume resulting from a 24-hour, 25-year storm.

(i) Collection and holding facilities, e.g., tanks or basins, associated with run-on and run-off control systems shall be emptied or otherwise managed expeditiously after storms to maintain design capacity of the system.

(j) If the landfill contains any particulate matter which may be subject to wind dispersal, the owner or operator shall cover or otherwise manage the landfill to control wind dispersal.

(k) The Director shall specify in the permit all design and operating practices that are necessary to ensure that the requirements of Section R315-264-301 are satisfied.

R315-264-302. Action Leakage Rate.

(a) The Director shall approve an action leakage rate for landfill units subject to Subsections R315-264-301(c) or (d). The action leakage rate is the maximum design flow rate that the leak detection system can remove without the fluid head on the

bottom liner exceeding 30.5 cm, 1 foot. The action leakage rate shall include an adequate safety margin to allow for uncertainties in the design, e.g., slope, hydraulic conductivity, thickness of drainage material, construction, operation, and location of the leak detection system, waste and leachate characteristics, likelihood and amounts of other sources of liquids in the leak detection system, and proposed response actions, e.g., the action leakage rate shall consider decreases in the flow capacity of the system over time resulting from siltation and clogging, rib layover and creep of synthetic components of the system, overburden pressures, etc.

(b) To determine if the action leakage rate has been exceeded, the owner or operator shall convert the weekly or monthly flow rate from the monitoring data obtained under Subsection R315-264-303(c) to an average daily flow rate, gallons per acre per day, for each sump. Unless the Director approves a different calculation, the average daily flow rate for each sump shall be calculated weekly during the active life and closure period, and monthly during the post-closure care period when monthly monitoring is required under Subsection R315-264-303(c).

R315-264-303. Monitoring and Inspection.

(a) During construction or installation, liners, except in the case of existing portions of landfills exempt from Subsection R315-264-301(a) and cover systems, e.g., membranes, sheets, or coatings, shall be inspected for uniformity, damage, and imperfections, e.g., holes, cracks, thin spots, or foreign materials. Immediately after construction or installation:

(1) Synthetic liners and covers shall be inspected to ensure tight seams and joints and the absence of tears, punctures, or blisters; and

(2) Soil-based and admixed liners and covers shall be inspected for imperfections including lenses, cracks, channels, root holes, or other structural non-uniformities that may cause an increase in the permeability of the liner or cover.

(b) While a landfill is in operation, it shall be inspected weekly and after storms to detect evidence of any of the following:

(1) Deterioration, malfunctions, or improper operation of run-on and run-off control systems;

(2) Proper functioning of wind dispersal control systems, where present; and

(3) The presence of leachate in and proper functioning of leachate collection and removal systems, where present.

(c)(1) An owner or operator required to have a leak detection system under Subsection R315-264-301(c) or (d) shall record the amount of liquids removed from each leak detection system sump at least once each week during the active life and closure period.

(2) After the final cover is installed, the amount of liquids removed from each leak detection system sump shall be recorded at least monthly. If the liquid level in the sump stays below the pump operating level for two consecutive months, the amount of liquids in the sumps shall be recorded at least quarterly. If the liquid level in the sump stays below the pump operating level for two consecutive quarters, the amount of liquids in the sumps shall be recorded at least semi-annually. If at any time during the post-closure care period the pump operating level is exceeded at units on quarterly or semi-annual recording schedules, the owner or operator shall return to monthly recording of amounts of liquids removed from each sump until the liquid level again stays below the pump operating level for two consecutive months.

(3) "Pump operating level" is a liquid level proposed by the owner or operator and approved by the Director based on pump activation level, sump dimensions, and level that avoids backup into the drainage layer and minimizes head in the sump.

R315-264-304. Response Actions.

(a) The owner or operator of landfill units subject to Subsections R315-264-301(c) or (d) shall have an approved response action plan before receipt of waste. The response action plan shall set forth the actions to be taken if the action leakage rate has been exceeded. At a minimum, the response action plan shall describe the actions specified in Subsection R315-264-304(b).

(b) If the flow rate into the leak detection system exceeds the action leakage rate for any sump, the owner or operator shall:

(1) Notify the Director in writing of the exceedance within 7 days of the determination;

(2) Submit a preliminary written assessment to the Director within 14 days of the determination, as to the amount of liquids, likely sources of liquids, possible location, size, and cause of any leaks, and short-term actions taken and planned;

(3) Determine to the extent practicable the location, size, and cause of any leak;

(4) Determine whether waste receipt should cease or be curtailed, whether any waste should be removed from the unit for inspection, repairs, or controls, and whether or not the unit should be closed;

(5) Determine any other short-term and longer-term actions to be taken to mitigate or stop any leaks; and

(6) Within 30 days after the notification that the action leakage rate has been exceeded, submit to the Director the results of the analyses specified in Subsections R315-264-304(b)(3), (4), and (5), the results of actions taken, and actions planned. Monthly thereafter, as long as the flow rate in the leak detection system exceeds the action leakage rate, the owner or operator shall submit to the Director a report summarizing the results of any remedial actions taken and actions planned.

(c) To make the leak and/or remediation determinations in Subsections R315-264-304(b)(3), (4), and (5), the owner or operator shall:

(1)(i) Assess the source of liquids and amounts of liquids by source,

(ii) Conduct a fingerprint, hazardous constituent, or other analyses of the liquids in the leak detection system to identify the source of liquids and possible location of any leaks, and the hazard and mobility of the liquid; and

(iii) Assess the seriousness of any leaks in terms of potential for escaping into the environment; or

(2) Document why such assessments are not needed.

R315-264-309. Surveying and Recordkeeping.

The owner or operator of a landfill shall maintain the following items in the operating record required under Section R315-264-73:

(a) On a map, the exact location and dimensions, including depth, of each cell with respect to permanently surveyed benchmarks; and

(b) The contents of each cell and the approximate location of each hazardous waste type within each cell.

R315-264-310. Closure and Post-Closure Care.

(a) At final closure of the landfill or upon closure of any cell, the owner or operator shall cover the landfill or cell with a final cover designed and constructed to:

(1) Provide long-term minimization of migration of liquids through the closed landfill;

(2) Function with minimum maintenance;

(3) Promote drainage and minimize erosion or abrasion of the cover;

(4) Accommodate settling and subsidence so that the cover's integrity is maintained; and

(5) Have a permeability less than or equal to the permeability of any bottom liner system or natural subsoils

present.

(b) After final closure, the owner or operator shall comply with all post-closure requirements contained in Sections R315-264-117 through 120, including maintenance and monitoring throughout the post-closure care period, specified in the permit under Section R315-264-117. The owner or operator shall:

(1) Maintain the integrity and effectiveness of the final cover, including making repairs to the cap as necessary to correct the effects of settling, subsidence, erosion, or other events;

(2) Continue to operate the leachate collection and removal system until leachate is no longer detected;

(3) Maintain and monitor the leak detection system in accordance with Subsections R315-264-301(c)(3)(iv) and (4) and R315-264-303(c), and comply with all other applicable leak detection system requirements of Rul3 R315-264;

(4) Maintain and monitor the ground-water monitoring system and comply with all other applicable requirements of Sections R315-264-90 through 101;

(5) Prevent run-on and run-off from eroding or otherwise damaging the final cover; and

(6) Protect and maintain surveyed benchmarks used in complying with Section R315-264-309.

R315-264-312. Special Requirements for Ignitable or Reactive Waste.

(a) Except as provided in Subsection R315-264-312(b), and in Section R316-264-316, ignitable or reactive waste shall not be placed in a landfill, unless the waste and landfill meet all applicable requirements of Rule R315-268, and:

(1) The resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive waste under Sections R315-261-21 or 23; and

(2) Subsection R315-264-17(b) is complied with.

(b) Except for prohibited wastes which remain subject to treatment standards in Sections R315-268-40 through 49, ignitable wastes in containers may be landfilled without meeting the requirements of Subsection R315-264-312(a), provided that the wastes are disposed of in such a way that they are protected from any material or conditions which may cause them to ignite. At a minimum, ignitable wastes shall be disposed of in non-leaking containers which are carefully handled and placed so as to avoid heat, sparks, rupture, or any other condition that might cause ignition of the wastes; shall be covered daily with soil or other non-combustible material to minimize the potential for ignition of the wastes; and shall not be disposed of in cells that contain or will contain other wastes which may generate heat sufficient to cause ignition of the waste.

R315-264-313. Special Requirements for Incompatible Wastes.

Incompatible wastes, or incompatible wastes and materials, (see appendix V of Rule R315-264 for examples) shall not be placed in the same landfill cell, unless Subsection R315-264-17(b) is complied with.

R315-264-314. Special Requirements for Bulk and Containerized Liquids.

(a) The placement of bulk or non-containerized liquid hazardous waste or hazardous waste containing free liquids, whether or not sorbents have been added, in any landfill is prohibited.

(b) To demonstrate the absence or presence of free liquids in either a containerized or a bulk waste, the following test shall be used: Method 9095B, Paint Filter Liquids Test, as described in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference in Section R315-260-11.

(c) Containers holding free liquids shall not be placed in

a landfill unless:

- (1) All free-standing liquid:
 - (i) Has been removed by decanting, or other methods;
 - (ii) Has been mixed with sorbent or solidified so that free-standing liquid is no longer observed; or
 - (iii) Has been otherwise eliminated; or
- (2) The container is very small, such as an ampule; or
- (3) The container is designed to hold free liquids for use other than storage, such as a battery or capacitor; or
- (4) The container is a lab pack as defined in Section R315-264-316 and is disposed of in accordance with Section R315-264-316.

(d) Sorbents used to treat free liquids to be disposed of in landfills shall be nonbiodegradable. Nonbiodegradable sorbents are: materials listed or described in Subsection R315-264-314(d)(1); materials that pass one of the tests in Subsection R315-264-314(d)(2); or materials that are determined by the Director to be nonbiodegradable through the Rule R315-260 petition process.

- (1) Nonbiodegradable sorbents.
 - (i) Inorganic minerals, other inorganic materials, and elemental carbon, e.g., aluminosilicates, clays, smectites, Fuller's earth, bentonite, calcium bentonite, montmorillonite, calcined montmorillonite, kaolinite, micas - illite, vermiculites, zeolites; calcium carbonate (organic free limestone); oxides/hydroxides, alumina, lime, silica - sand, diatomaceous earth; perlite - volcanic glass; expanded volcanic rock; volcanic ash; cement kiln dust; fly ash; rice hull ash; activated charcoal/activated carbon; or
 - (ii) High molecular weight synthetic polymers, e.g., polyethylene, high density polyethylene (HDPE), polypropylene, polystyrene, polyurethane, polyacrylate, polynorborene, polyisobutylene, ground synthetic rubber, cross-linked allylstyrene and tertiary butyl copolymers. This does not include polymers derived from biological material or polymers specifically designed to be degradable; or
 - (iii) Mixtures of these nonbiodegradable materials.
- (2) Tests for nonbiodegradable sorbents.
 - (i) The sorbent material is determined to be nonbiodegradable under ASTM Method G21-70 (1984a)-Standard Practice for Determining Resistance of Synthetic Polymer Materials to Fungi; or
 - (ii) The sorbent material is determined to be nonbiodegradable under ASTM Method G22-76 (1984b)-Standard Practice for Determining Resistance of Plastics to Bacteria; or
 - (iii) The sorbent material is determined to be nonbiodegradable under OECD test 301B: CO₂ Evolution - Modified Sturm Test.

(e) The placement of any liquid which is not a hazardous waste in a landfill is prohibited unless the owner or operator of such landfill demonstrates to the Director, or the Director determines that:

- (1) The only reasonably available alternative to the placement in such landfill is placement in a landfill or unlined surface impoundment, whether or not permitted or operating under interim status, which contains, or may reasonably be anticipated to contain, hazardous waste; and
- (2) Placement in such owner or operator's landfill will not present a risk of contamination of any "underground source of drinking water," as that term is defined in Section R315-270-2.

R315-264-315. Special Requirements for Containers.

Unless they are very small, such as an ampule, containers shall be either:

- (a) At least 90 percent full when placed in the landfill; or
- (b) Crushed, shredded, or similarly reduced in volume to the maximum practical extent before burial in the landfill.

R315-264-316. Disposal of Small Containers of Hazardous Waste in Overpacked Drums (Lab Packs).

Small containers of hazardous waste in overpacked drums, lab packs, may be placed in a landfill if the following requirements are met:

(a) Hazardous waste shall be packaged in non-leaking inside containers. The inside containers shall be of a design and constructed of a material that will not react dangerously with, be decomposed by, or be ignited by the contained waste. Inside containers shall be tightly and securely sealed. The inside containers shall be of the size and type specified in the Department of Transportation hazardous materials regulations, 49 CFR parts 173, 178, and 179, if those regulations specify a particular inside container for the waste.

(b) The inside containers shall be overpacked in an open head Department of Transportation-specification metal shipping container, 49 CFR parts 178 and 179, of no more than 416-liter, 110 gallon, capacity and surrounded by, at a minimum, a sufficient quantity of sorbent material, determined to be nonbiodegradable in accordance with Subsection R315-264-314(d), to completely sorb all of the liquid contents of the inside containers. The metal outer container shall be full after it has been packed with inside containers and sorbent material.

(c) The sorbent material used shall not be capable of reacting dangerously with, being decomposed by, or being ignited by the contents of the inside containers, in accordance with Subsection R315-264-17(b).

(d) Incompatible wastes, as defined in Section R315-260-10, shall not be placed in the same outside container.

(e) Reactive wastes, other than cyanide- or sulfide-bearing waste as defined in Subsection R315-261-23(a)(5), shall be treated or rendered non-reactive prior to packaging in accordance with Subsections R315-264-316(a) through (d). Cyanide- and sulfide-bearing reactive waste may be packed in accordance with Subsections R315-264-316(a) through (d) without first being treated or rendered non-reactive.

(f) Such disposal is in compliance with the requirements of Rule R315-268. Persons who incinerate lab packs according to the requirements in Subsection R315-268-42(c)(1) may use fiber drums in place of metal outer containers. Such fiber drums shall meet the Department of Transportation specifications in 49 CFR 173.12 and be overpacked according to the requirements in Subsection R315-264-316(b).

R315-264-317. Special Requirements for Hazardous Wastes F020, F021, F022, F023, F026, and F027.

(a) Hazardous Wastes F020, F021, F022, F023, F026, and F027 shall not be placed in a landfill unless the owner or operator operates the landfill in accord with a management plan for these wastes that is approved by the Director pursuant to the standards set out in Section R315-264-317, and in accord with all other applicable requirements of Rule R315-264. The factors to be considered are:

- (1) The volume, physical, and chemical characteristics of the wastes, including their potential to migrate through the soil or to volatilize or escape into the atmosphere;
- (2) The attenuative properties of underlying and surrounding soils or other materials;
- (3) The mobilizing properties of other materials co-disposed with these wastes; and
- (4) The effectiveness of additional treatment, design, or monitoring requirements.

(b) The Director may determine that additional design, operating, and monitoring requirements are necessary for landfills managing hazardous wastes F020, F021, F022, F023, F026, and F027 in order to reduce the possibility of migration of these wastes to ground water, surface water, or air so as to protect human health and the environment.

R315-264-340. Incinerator -- Applicability.

(a) The regulations of Sections R315-264-340 through 351 apply to owners and operators of hazardous waste incinerators, as defined in Section R315-260-10, except as Section R315-264-1 provides otherwise.

(b) Integration of the MACT standards.

(1) Except as provided by Subsections R315-264-340(b)(2) through (b)(4), the standards of Rule R315-264 do not apply to a new hazardous waste incineration unit that becomes subject to RCRA permit requirements after October 12, 2005; or no longer apply when an owner or operator of an existing hazardous waste incineration unit demonstrates compliance with the maximum achievable control technology (MACT) requirements of Section R307-214-2 by conducting a comprehensive performance test and submitting to the Director a Notification of Compliance under Section R307-14-2 documenting compliance with the requirements of Section R307-14-2. Nevertheless, even after this demonstration of compliance with the MACT standards, RCRA permit conditions that were based on the standards of Rule R315-264 shall continue to be in effect until they are removed from the permit or the permit is terminated or revoked, unless the permit expressly provides otherwise.

(2) The MACT standards do not replace the closure requirements of Section R315-264-351 or the applicable requirements of Sections R315-264-1 through 4, 10 through 19, 30 through 37, 50 through 56, 70 through 77, 90 through 101, 110 through 120, 140 through 151, 1050 through 1065 and 1080 through 1090.

(3) The particulate matter standard of Subsection R315-264-343(c) remains in effect for incinerators that elect to comply with the alternative to the particulate matter standard under Section R307-214-2.

(4) The following requirements remain in effect for startup, shutdown, and malfunction events if you elect to comply with Subsection R315-270-235(a)(1)(i) to minimize emissions of toxic compounds from these events:

(i) Subsection R315-264-345(a) requiring that an incinerator operate in accordance with operating requirements specified in the permit; and

(ii) Subsection R315-264-345(c) requiring compliance with the emission standards and operating requirements during startup and shutdown if hazardous waste is in the combustion chamber, except for particular hazardous wastes.

(c) After consideration of the waste analysis included with part B of the permit application, the Director, in establishing the permit conditions, shall exempt the applicant from all requirements of Sections R315-264-340 through 351 except Section R315-264-341, Waste analysis, and Section R315-264-351, Closure,

(1) If the Director finds that the waste to be burned is:

(i) Listed as a hazardous waste in Sections R315-261-30 through 35 solely because it is ignitable, Hazard Code I, corrosive, Hazard Code C, or both; or

(ii) Listed as a hazardous waste in Sections R315-261-30 through 35 solely because it is reactive, Hazard Code R, for characteristics other than those listed in Subsections R315-261-23(a)(4) and (5), and will not be burned when other hazardous wastes are present in the combustion zone; or

(iii) A hazardous waste solely because it possesses the characteristic of ignitability, corrosivity, or both, as determined by the test for characteristics of hazardous wastes under Sections R315-261-20 through 24; or

(iv) A hazardous waste solely because it possesses any of the reactivity characteristics described by Subsections R315-261-23(a)(1), (2), (3), (6), (7), and (8), and will not be burned when other hazardous wastes are present in the combustion zone; and

(2) If the waste analysis shows that the waste contains

none of the hazardous constituents listed in Rule R315-261, appendix VIII, which would reasonably be expected to be in the waste.

(d) If the waste to be burned is one which is described by Subsections R315-264-340(b)(1)(i), (ii), (iii), or (iv) and contains insignificant concentrations of the hazardous constituents listed in Rule R315-261, appendix VIII, then the Director may, in establishing permit conditions, exempt the applicant from all requirements of Sections R315-264-340 through 351, except Section R315-264-341, Waste analysis, and Section R315-264-351, Closure, after consideration of the waste analysis included with part B of the permit application, unless the Director finds that the waste will pose a threat to human health and the environment when burned in an incinerator.

(e) The owner or operator of an incinerator may conduct trial burns subject only to the requirements of Section R315-270-62, Short term and incinerator permits.

R315-264-341. Waste Analysis.

(a) As a portion of the trial burn plan required by Section R315-270-62, or with part B of the permit application, the owner or operator shall have included an analysis of the waste feed sufficient to provide all information required by Subsection R315-270-62(b) or Section R315-270-19. Owners or operators of new hazardous waste incinerators shall provide the information required by Subsection R315-270-62(c) or Section R315-270-19 to the greatest extent possible.

(b) Throughout normal operation the owner or operator shall conduct sufficient waste analysis to verify that waste feed to the incinerator is within the physical and chemical composition limits specified in his permit, under Subsection R315-264-345(b).

R315-264-342. Principal Organic Hazardous Constituents.

(a) Principal organic hazardous constituents in the waste feed shall be treated to the extent required by the performance standard of Section R315-264-343.

(b)(1) One or more principal organic hazardous constituents shall be specified in the facility's permit, from among those constituents listed in appendix VIII of Rule R315-261 for each waste feed to be burned. This specification shall be based on the degree of difficulty of incineration of the organic constituents in the waste and on their concentration or mass in the waste feed, considering the results of waste analyses and trial burns or alternative data submitted with part B of the facility's permit application. Organic constituents which represent the greatest degree of difficulty of incineration will be those most likely to be designated as principal organic hazardous constituents. Constituents are more likely to be designated as principal organic hazardous constituents if they are present in large quantities or concentrations in the waste.

(2) Trial principal organic hazardous constituents shall be designated for performance of trial burns in accordance with the procedure specified in Section R315-270-62 for obtaining trial burn permits.

R315-264-343. Performance Standards.

An incinerator burning hazardous waste shall be designed, constructed, and maintained so that, when operated in accordance with operating requirements specified under Section R315-264-345, it shall meet the following performance standards:

(a)(1) Except as provided in Subsection R315-264-343(a)(2), an incinerator burning hazardous waste shall achieve a destruction and removal efficiency of 99.99% for each principal organic hazardous constituent designated, under Section R315-264-342, in its permit for each waste feed. Destruction and removal efficiency is determined for each principal organic hazardous constituent from the following

equation:

$$\text{Destruction and removal efficiency} = ((\text{Win} - \text{Wout}) / \text{Win}) \times 100\%$$

where:

Win = mass feed rate of one principal organic hazardous constituent in the waste stream feeding the incinerator and

Wout = mass emission rate of the same principal organic hazardous constituent present in exhaust emissions prior to release to the atmosphere.

(2) An incinerator burning hazardous wastes F020, F021, F022, F023, F026, or F027 shall achieve a destruction and removal efficiency of 99.9999% for each principal organic hazardous constituent designated, under Section R315-264-342, in its permit. This performance shall be demonstrated on principal organic hazardous constituents that are more difficult to incinerate than tetra-, penta-, and hexachlorodibenzo-p-dioxins and dibenzofurans. Destruction and removal efficiency is determined for each principal organic hazardous constituent from the equation in Subsection R315-264-343(a)(1).

(b) An incinerator burning hazardous waste and producing stack emissions of more than 1.8 kilograms per hour, 4 pounds per hour, of hydrogen chloride shall control hydrogen chloride emissions such that the rate of emission is no greater than the larger of either 1.8 kilograms per hour or 1% of the hydrogen chloride in the stack gas prior to entering any pollution control equipment.

(c) An incinerator burning hazardous waste shall not emit particulate matter in excess of 180 milligrams per dry standard cubic meter, 0.08 grains per dry standard cubic foot, when corrected for the amount of oxygen in the stack gas according to the formula:

$$P_c = P_m \times (14 / (21 - Y))$$

Where P_c is the corrected concentration of particulate matter, P_m is the measured concentration of particulate matter, and Y is the measured concentration of oxygen in the stack gas, using the Orsat method for oxygen analysis of dry flue gas, presented in 40 CFR 60, appendix A Method 3, which is adopted and incorporated by Section R307-221-3. This correction procedure is to be used by all hazardous waste incinerators except those operating under conditions of oxygen enrichment. For these facilities, the Director shall select an appropriate correction procedure, to be specified in the facility permit.

(d) For purposes of permit enforcement, compliance with the operating requirements specified in the permit, under Section R315-264-345, shall be regarded as compliance with Section R315-264-343. However, evidence that compliance with those permit conditions is insufficient to ensure compliance with the performance requirements of Section R315-264-343 may be "information" justifying modification, revocation, or reissuance of a permit under Section R315-270-41.

R315-264-344. Hazardous Waste Incinerator Permits.

(a) The owner or operator of a hazardous waste incinerator may burn only wastes specified in his permit and only under operating conditions specified for those wastes under Section R315-264-345, except:

- (1) In approved trial burns under Section R315-270-62; or
- (2) Under exemptions created by Section R315-264-340.

(b) Other hazardous wastes may be burned only after operating conditions have been specified in a new permit or a permit modification as applicable. Operating requirements for new wastes may be based on either trial burn results or alternative data included with part B of a permit application under Section R315-270-19.

(c) The permit for a new hazardous waste incinerator shall establish appropriate conditions for each of the applicable requirements of Sections R315-264-340 through 351, including

but not limited to allowable waste feeds and operating conditions necessary to meet the requirements of Section R315-264-345, sufficient to comply with the following standards:

(1) For the period beginning with initial introduction of hazardous waste to the incinerator and ending with initiation of the trial burn, and only for the minimum time required to establish operating conditions required in Subsection R315-264-344(c)(2), not to exceed a duration of 720 hours operating time for treatment of hazardous waste, the operating requirements shall be those most likely to ensure compliance with the performance standards of Section R315-264-343, based on the Director's engineering judgment. The Director may extend the duration of this period once for up to 720 additional hours when good cause for the extension is demonstrated by the applicant.

(2) For the duration of the trial burn, the operating requirements shall be sufficient to demonstrate compliance with the performance standards of Section R315-264-343 and shall be in accordance with the approved trial burn plan;

(3) For the period immediately following completion of the trial burn, and only for the minimum period sufficient to allow sample analysis, data computation, and submission of the trial burn results by the applicant, and review of the trial burn results and modification of the facility permit by the Director, the operating requirements shall be those most likely to ensure compliance with the performance standards of Section R315-264-343, based on the Director's engineering judgment.

(4) For the remaining duration of the permit, the operating requirements shall be those demonstrated, in a trial burn or by alternative data specified in Subsection R315-270-19(c), as sufficient to ensure compliance with the performance standards of Section R315-264-343.

R315-264-345. Operating Requirements.

(a) An incinerator shall be operated in accordance with operating requirements specified in the permit. These shall be specified on a case-by-case basis as those demonstrated, in a trial burn or in alternative data as specified in Subsection R315-264-344(b) and included with part B of a facility's permit application, to be sufficient to comply with the performance standards of Section R315-264-343.

(b) Each set of operating requirements shall specify the composition of the waste feed, including acceptable variations in the physical or chemical properties of the waste feed which will not affect compliance with the performance requirement of Section R315-264-343, to which the operating requirements apply. For each such waste feed, the permit shall specify acceptable operating limits including the following conditions:

- (1) Carbon monoxide level in the stack exhaust gas;
- (2) Waste feed rate;
- (3) Combustion temperature;
- (4) An appropriate indicator of combustion gas velocity;
- (5) Allowable variations in incinerator system design or operating procedures; and

(6) Such other operating requirements as are necessary to ensure that the performance standards of Section R315-264-343 are met.

(c) During start-up and shut-down of an incinerator, hazardous waste, except wastes exempted in accordance with Section R315-264-340, shall not be fed into the incinerator unless the incinerator is operating within the conditions of operation, temperature, air feed rate, etc., specified in the permit.

(d) Fugitive emissions from the combustion zone shall be controlled by:

- (1) Keeping the combustion zone totally sealed against fugitive emissions; or
- (2) Maintaining a combustion zone pressure lower than atmospheric pressure; or
- (3) An alternate means of control demonstrated, with part

B of the permit application, to provide fugitive emissions control equivalent to maintenance of combustion zone pressure lower than atmospheric pressure.

(e) An incinerator shall be operated with a functioning system to automatically cut off waste feed to the incinerator when operating conditions deviate from limits established under Subsection R315-264-345(a).

(f) An incinerator shall cease operation when changes in waste feed, incinerator design, or operating conditions exceed limits designated in its permit.

R315-264-347. Monitoring and Inspections.

(a) The owner or operator shall conduct, as a minimum, the following monitoring while incinerating hazardous waste:

(1) Combustion temperature, waste feed rate, and the indicator of combustion gas velocity specified in the facility permit shall be monitored on a continuous basis.

(2) Carbon monoxide shall be monitored on a continuous basis at a point in the incinerator downstream of the combustion zone and prior to release to the atmosphere.

(3) Upon request by the Director, sampling and analysis of the waste and exhaust emissions shall be conducted to verify that the operating requirements established in the permit achieve the performance standards of Section R315-264-343.

(b) The incinerator and associated equipment, pumps, valves, conveyors, pipes, etc., shall be subjected to thorough visual inspection, at least daily, for leaks, spills, fugitive emissions, and signs of tampering.

(c) The emergency waste feed cutoff system and associated alarms shall be tested at least weekly to verify operability, unless the applicant demonstrates to the Director that weekly inspections will unduly restrict or upset operations and that less frequent inspection will be adequate. At a minimum, operational testing shall be conducted at least monthly.

(d) This monitoring and inspection data shall be recorded and the records shall be placed in the operating record required by Section R315-264-73 and maintained in the operating record for five years.

R315-264-351. Closure.

At closure the owner or operator shall remove all hazardous waste and hazardous waste residues, including, but not limited to, ash, scrubber waters, and scrubber sludges, from the incinerator site.

At closure, as throughout the operating period, unless the owner or operator can demonstrate, in accordance with Subsection R315-261-3(d), that the residue removed from the incinerator is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and shall manage it in accordance with applicable requirements of Rules R315-262 through 266.

R315-264-550. Applicability of Corrective Action Management Unit (CAMU) Regulations.

(a) Except as provided in Subsection R315-264-550(b), CAMUs are subject to the requirements of Section R315-264-552.

(b) CAMUs that were approved before April 22, 2002, or for which substantially complete applications (or equivalents) were submitted to the Agency on or before November 20, 2000, are subject to the requirements in Section R315-264-551 for grandfathered CAMUs; CAMU waste, activities, and design shall not be subject to the standards in Section R315-264-552, so long as the waste, activities, and design remain within the general scope of the CAMU as approved.

R315-264-551. Grandfathered Corrective Action Management Units (CAMUs).

(a) To implement remedies under Section R315-264-101

or RCRA Section 3008(h), or to implement remedies at a permitted facility that is not subject to Section R315-264-101, the Director may designate an area at the facility as a corrective action management unit under the requirements in Section R315-264-551. Corrective action management unit means an area within a facility that is used only for managing remediation wastes for implementing corrective action or cleanup at the facility. A CAMU shall be located within the contiguous property under the control of the owner or operator where the wastes to be managed in the CAMU originated. One or more CAMUs may be designated at a facility.

(1) Placement of remediation wastes into or within a CAMU does not constitute land disposal of hazardous wastes.

(2) Consolidation or placement of remediation wastes into or within a CAMU does not constitute creation of a unit subject to minimum technology requirements.

(b)(1) The Director may designate a regulated unit, as defined in Subsection R315-264-90(a)(2), as a CAMU, or may incorporate a regulated unit into a CAMU, if:

(i) The regulated unit is closed or closing, meaning it has begun the closure process under Section R315-264-113 or 40 CFR 265.113, which is adopted by reference; and

(ii) Inclusion of the regulated unit will enhance implementation of effective, protective and reliable remedial actions for the facility.

(2) The requirements of Sections R315-264-90 through 101, 110 through 120, and 140 through 151 and the unit-specific requirements of Rules R315-264 or 265 that applied to that regulated unit shall continue to apply to that portion of the CAMU after incorporation into the CAMU.

(c) The Director shall designate a CAMU in accordance with the following:

(1) The CAMU shall facilitate the implementation of reliable, effective, protective, and cost-effective remedies;

(2) Waste management activities associated with the CAMU shall not create unacceptable risks to humans or to the environment resulting from exposure to hazardous wastes or hazardous constituents;

(3) The CAMU shall include uncontaminated areas of the facility, only if including such areas for the purpose of managing remediation waste is more protective than management of such wastes at contaminated areas of the facility;

(4) Areas within the CAMU, where wastes remain in place after closure of the CAMU, shall be managed and contained so as to minimize future releases, to the extent practicable;

(5) The CAMU shall expedite the timing of remedial activity implementation, when appropriate and practicable;

(6) The CAMU shall enable the use, when appropriate, of treatment technologies, including innovative technologies, to enhance the long-term effectiveness of remedial actions by reducing the toxicity, mobility, or volume of wastes that will remain in place after closure of the CAMU; and

(7) The CAMU shall, to the extent practicable, minimize the land area of the facility upon which wastes will remain in place after closure of the CAMU.

(d) The owner/operator shall provide sufficient information to enable the Director to designate a CAMU in accordance with the criteria in Section R315-264-552.

(e) The Director shall specify, in the permit or order, requirements for CAMUs to include the following:

(1) The areal configuration of the CAMU.

(2) Requirements for remediation waste management to include the specification of applicable design, operation and closure requirements.

(3) Requirements for ground water monitoring that are sufficient to:

(i) Continue to detect and to characterize the nature, extent, concentration, direction, and movement of existing releases of hazardous constituents in ground water from sources

located within the CAMU; and

(ii) Detect and subsequently characterize releases of hazardous constituents to ground water that may occur from areas of the CAMU in which wastes will remain in place after closure of the CAMU.

(4) Closure and post-closure requirements.

(i) Closure of corrective action management units shall:

(A) Minimize the need for further maintenance; and

(B) Control, minimize, or eliminate, to the extent necessary to protect human health and the environment, for areas where wastes remain in place, post-closure escape of hazardous waste, hazardous constituents, leachate, contaminated runoff, or hazardous waste decomposition products to the ground, to surface waters, or to the atmosphere.

(ii) Requirements for closure of CAMUs shall include the following, as appropriate and as deemed necessary by the Director for a given CAMU:

(A) Requirements for excavation, removal, treatment or containment of wastes;

(B) For areas in which wastes will remain after closure of the CAMU, requirements for capping of such areas; and

(C) Requirements for removal and decontamination of equipment, devices, and structures used in remediation waste management activities within the CAMU.

(iii) In establishing specific closure requirements for CAMUs under Subsection R315-264-552(e), the Director shall consider the following factors:

(A) CAMU characteristics;

(B) Volume of wastes which remain in place after closure;

(C) Potential for releases from the CAMU;

(D) Physical and chemical characteristics of the waste;

(E) Hydrological and other relevant environmental conditions at the facility which may influence the migration of any potential or actual releases; and

(F) Potential for exposure of humans and environmental receptors if releases were to occur from the CAMU.

(iv) Post-closure requirements as necessary to protect human health and the environment, to include, for areas where wastes will remain in place, monitoring and maintenance activities, and the frequency with which such activities shall be performed to ensure the integrity of any cap, final cover, or other containment system.

(f) The Director shall document the rationale for designating CAMUs and shall make such documentation available to the public.

(g) Incorporation of a CAMU into an existing permit shall be approved by the Director according to the procedures for permit modifications under Section R315-270-41, or according to the permit modification procedures of Section R315-270-42.

(h) The designation of a CAMU does not change the Director's existing authority to address clean-up levels, media-specific points of compliance to be applied to remediation at a facility, or other remedy selection decisions.

R315-264-552. Corrective Action Management Units (CAMU).

(a) To implement remedies under Subsection R315-264-101 or RCRA Section 3008(h), or to implement remedies at a permitted facility that is not subject to Subsection R315-264-101, the Director may designate an area at the facility as a corrective action management unit under the requirements in Section R315-264-552. Corrective action management unit means an area within a facility that is used only for managing CAMU-eligible wastes for implementing corrective action or cleanup at the facility. A CAMU shall be located within the contiguous property under the control of the owner or operator where the wastes to be managed in the CAMU originated. One or more CAMUs may be designated at a facility.

(1) CAMU-eligible waste means:

(i) All solid and hazardous wastes, and all media, including ground water, surface water, soils, and sediments, and debris, that are managed for implementing cleanup. As-generated wastes, either hazardous or non-hazardous, from ongoing industrial operations at a site are not CAMU-eligible wastes.

(ii) Wastes that would otherwise meet the description in Subsection R315-264-552(a)(1)(i) are not "CAMU-Eligible Wastes" where:

(A) The wastes are hazardous wastes found during cleanup in intact or substantially intact containers, tanks, or other non-land-based units found above ground, unless the wastes are first placed in the tanks, containers or non-land-based units as part of cleanup, or the containers or tanks are excavated during the course of cleanup; or

(B) The Director exercises the discretion in Subsection R315-264-552(a)(2) to prohibit the wastes from management in a CAMU.

(iii) Notwithstanding Subsection R315-264-552(a)(1)(i), where appropriate, as-generated non-hazardous waste may be placed in a CAMU where such waste is being used to facilitate treatment or the performance of the CAMU.

(2) The Director may prohibit, where appropriate, the placement of waste in a CAMU where the Director has or receives information that such wastes have not been managed in compliance with applicable land disposal treatment standards of Rule R315-268, or applicable unit design requirements of Rule R315-264, or applicable unit design requirements of Rule R315-265, or that non-compliance with other applicable requirements of Rules R315-260 through 266, 268, 270 and 273 likely contributed to the release of the waste.

(3) Prohibition against placing liquids in CAMUs.

(i) The placement of bulk or noncontainerized liquid hazardous waste or free liquids contained in hazardous waste, whether or not sorbents have been added, in any CAMU is prohibited except where placement of such wastes facilitates the remedy selected for the waste.

(ii) The requirements in Subsection R315-264-314(c) for placement of containers holding free liquids in landfills apply to placement in a CAMU except where placement facilitates the remedy selected for the waste.

(iii) The placement of any liquid which is not a hazardous waste in a CAMU is prohibited unless such placement facilitates the remedy selected for the waste or a demonstration is made pursuant to Subsection R315-264-314(e).

(iv) The absence or presence of free liquids in either a containerized or a bulk waste shall be determined in accordance with Subsection R315-264-314(b). Sorbents used to treat free liquids in CAMUs shall meet the requirements of Subsection R315-264-314(d).

(4) Placement of CAMU-eligible wastes into or within a CAMU does not constitute land disposal of hazardous wastes.

(5) Consolidation or placement of CAMU-eligible wastes into or within a CAMU does not constitute creation of a unit subject to minimum technology requirements.

(b)(1) The Director may designate a regulated unit, as defined in Subsection R315-264-90(a)(2), as a CAMU, or may incorporate a regulated unit into a CAMU, if:

(i) The regulated unit is closed or closing, meaning it has begun the closure process under Section R315-264-113 or 40 CFR 265.113, which is adopted by reference; and

(ii) Inclusion of the regulated unit will enhance implementation of effective, protective and reliable remedial actions for the facility.

(2) The requirements of Sections R315-264-90 through 101, 110 through 120, and 140 through 151 and the unit-specific requirements of Rules R315-264 or 265 that applied to the regulated unit shall continue to apply to that portion of the CAMU after incorporation into the CAMU.

(c) The Director shall designate a CAMU that will be used for storage and/or treatment only in accordance with Subsection R315-264-552(f). The Director shall designate all other CAMUs in accordance with the following:

(1) The CAMU shall facilitate the implementation of reliable, effective, protective, and cost-effective remedies;

(2) Waste management activities associated with the CAMU shall not create unacceptable risks to humans or to the environment resulting from exposure to hazardous wastes or hazardous constituents;

(3) The CAMU shall include uncontaminated areas of the facility, only if including such areas for the purpose of managing CAMU-eligible waste is more protective than management of such wastes at contaminated areas of the facility;

(4) Areas within the CAMU, where wastes remain in place after closure of the CAMU, shall be managed and contained so as to minimize future releases, to the extent practicable;

(5) The CAMU shall expedite the timing of remedial activity implementation, when appropriate and practicable;

(6) The CAMU shall enable the use, when appropriate, of treatment technologies, including innovative technologies, to enhance the long-term effectiveness of remedial actions by reducing the toxicity, mobility, or volume of wastes that will remain in place after closure of the CAMU; and

(7) The CAMU shall, to the extent practicable, minimize the land area of the facility upon which wastes will remain in place after closure of the CAMU.

(d) The owner/operator shall provide sufficient information to enable the Director to designate a CAMU in accordance with the criteria in Section R315-264-552. This shall include, unless not reasonably available, information on:

(1) The origin of the waste and how it was subsequently managed, including a description of the timing and circumstances surrounding the disposal and/or release;

(2) Whether the waste was listed or identified as hazardous at the time of disposal and/or release; and

(3) Whether the disposal and/or release of the waste occurred before or after the land disposal requirements of Rule R315-268 were in effect for the waste listing or characteristic.

(e) The Director shall specify, in the permit or order, requirements for CAMUs to include the following:

(1) The areal configuration of the CAMU.

(2) Except as provided in Subsection R315-264-552(g), requirements for CAMU-eligible waste management to include the specification of applicable design, operation, treatment and closure requirements.

(3) Minimum design requirements. CAMUs, except as provided in Subsection R315-264-552(f), into which wastes are placed shall be designed in accordance with the following:

(i) Unless the Director approves alternate requirements under Subsection R315-264-552(e)(3)(ii), CAMUs that consist of new, replacement, or laterally expanded units shall include a composite liner and a leachate collection system that is designed and constructed to maintain less than a 30-cm depth of leachate over the liner. For purposes of Section R315-264-552, composite liner means a system consisting of two components; the upper component shall consist of a minimum 30-mil flexible membrane liner (FML), and the lower component shall consist of at least a two-foot layer of compacted soil with a hydraulic conductivity of no more than 1×10^{-7} cm/sec. FML components consisting of high density polyethylene (HDPE) shall be at least 60 mil thick. The FML component shall be installed in direct and uniform contact with the compacted soil component;

(ii) Alternate requirements. The Director may approve alternate requirements if:

(A) The Director finds that alternate design and operating practices, together with location characteristics, will prevent the migration of any hazardous constituents into the ground water

or surface water at least as effectively as the liner and leachate collection systems in Subsection R315-264-552(e)(3)(i); or

(B) The CAMU is to be established in an area with existing significant levels of contamination, and the Director finds that an alternative design, including a design that does not include a liner, would prevent migration from the unit that would exceed long-term remedial goals.

(4) Minimum treatment requirements: Unless the wastes will be placed in a CAMU for storage and/or treatment only in accordance with Subsection R315-264-552(f), CAMU-eligible wastes that, absent Section R315-264-552, would be subject to the treatment requirements of Rule R315-268, and that the Director determines contain principal hazardous constituents shall be treated to the standards specified in Subsection R315-264-552(e)(4)(iii).

(i) Principal hazardous constituents are those constituents that the Director determines pose a risk to human health and the environment substantially higher than the cleanup levels or goals at the site.

(A) In general, the Director shall designate as principal hazardous constituents:

(I) Carcinogens that pose a potential direct risk from ingestion or inhalation at the site at or above 10^{-3} ; and

(II) Non-carcinogens that pose a potential direct risk from ingestion or inhalation at the site an order of magnitude or greater over their reference dose.

(B) The Director shall also designate constituents as principal hazardous constituents, where appropriate, when risks to human health and the environment posed by the potential migration of constituents in wastes to ground water are substantially higher than cleanup levels or goals at the site; when making such a designation, the Director may consider such factors as constituent concentrations, and fate and transport characteristics under site conditions.

(C) The Director may also designate other constituents as principal hazardous constituents that the Director determines pose a risk to human health and the environment substantially higher than the cleanup levels or goals at the site.

(ii) In determining which constituents are "principal hazardous constituents," the Director shall consider all constituents which, absent Section R315-264-552, would be subject to the treatment requirements in Rule R315-268.

(iii) Waste that the Director determines contains principal hazardous constituents shall meet treatment standards determined in accordance with Subsections R315-264-552(e)(4)(iv) or (e)(4)(v).

(iv) Treatment standards for wastes placed in CAMUs.

(A) For non-metals, treatment shall achieve 90 percent reduction in total principal hazardous constituent concentrations, except as provided by Subsection R315-264-552(e)(4)(iv)(C).

(B) For metals, treatment shall achieve 90 percent reduction in principal hazardous constituent concentrations as measured in leachate from the treated waste or media, tested according to the TCLP, or 90 percent reduction in total constituent concentrations, when a metal removal treatment technology is used, except as provided by Subsection R315-264-552(e)(4)(iv)(C).

(C) When treatment of any principal hazardous constituent to a 90 percent reduction standard would result in a concentration less than 10 times the Universal Treatment Standard for that constituent, treatment to achieve constituent concentrations less than 10 times the Universal Treatment Standard is not required. Universal Treatment Standards are identified in Section R315-268-48 Table UTS.

(D) For waste exhibiting the hazardous characteristic of ignitability, corrosivity or reactivity, the waste shall also be treated to eliminate these characteristics.

(E) For debris, the debris shall be treated in accordance

with Section R315-268-45, or by methods or to levels established under Subsections R315-264-552(e)(4)(iv)(A) through (D) or Subsection R315-264-552(e)(4)(v), whichever the Director determines is appropriate.

(F) Alternatives to TCLP. For metal bearing wastes for which metals removal treatment is not used, the Director may specify a leaching test other than the TCLP, SW846 Method 1311, Rule R315-260-11(c)(3)(v), to measure treatment effectiveness, provided the Director determines that an alternative leach testing protocol is appropriate for use, and that the alternative more accurately reflects conditions at the site that affect leaching.

(v) Adjusted standards. The Director may adjust the treatment level or method in Subsection R315-264-552(e)(4)(iv) to a higher or lower level, based on one or more of the following factors, as appropriate. The adjusted level or method shall be protective of human health and the environment:

(A) The technical impracticability of treatment to the levels or by the methods in Subsection R315-264-552(e)(4)(iv);

(B) The levels or methods in Subsection R315-264-552(e)(4)(iv) would result in concentrations of principal hazardous constituents (PHCs) that are significantly above or below cleanup standards applicable to the site, established either site-specifically, or promulgated under state or federal law;

(C) The views of the affected local community on the treatment levels or methods in Subsection R315-264-552(e)(4)(iv) as applied at the site, and, for treatment levels, the treatment methods necessary to achieve these levels;

(D) The short-term risks presented by the on-site treatment method necessary to achieve the levels or treatment methods in Subsection R315-264-552(e)(4)(iv);

(E) The long-term protection offered by the engineering design of the CAMU and related engineering controls:

(I) Where the treatment standards in Subsection R315-264-552(e)(4)(iv) are substantially met and the principal hazardous constituents in the waste or residuals are of very low mobility; or

(II) Where cost-effective treatment has been used and the CAMU meets the Subtitle C liner and leachate collection requirements for new land disposal units at Subsections R315-264-301(c) and (d); or

(III) Where, after review of appropriate treatment technologies, the Director determines that cost-effective treatment is not reasonably available, and the CAMU meets the Subtitle C liner and leachate collection requirements for new land disposal units at Subsection R315-264-301(c) and (d); or

(IV) Where cost-effective treatment has been used and the principal hazardous constituents in the treated wastes are of very low mobility; or

(V) Where, after review of appropriate treatment technologies, the Director determines that cost-effective treatment is not reasonably available, the principal hazardous constituents in the wastes are of very low mobility, and either the CAMU meets or exceeds the liner standards for new, replacement, or laterally expanded CAMUs in Subsections R315-264-552(e)(3)(i) and (ii), or the CAMU provides substantially equivalent or greater protection.

(vi) The treatment required by the treatment standards shall be completed prior to, or within a reasonable time after, placement in the CAMU.

(vii) For the purpose of determining whether wastes placed in CAMUs have met site-specific treatment standards, the Director may, as appropriate, specify a subset of the principal hazardous constituents in the waste as analytical surrogates for determining whether treatment standards have been met for other principal hazardous constituents. This specification shall be based on the degree of difficulty of treatment and analysis of constituents with similar treatment properties.

(5) Except as provided in Subsection R315-264-552(f),

requirements for ground water monitoring and corrective action that are sufficient to:

(i) Continue to detect and to characterize the nature, extent, concentration, direction, and movement of existing releases of hazardous constituents in ground water from sources located within the CAMU; and

(ii) Detect and subsequently characterize releases of hazardous constituents to ground water that may occur from areas of the CAMU in which wastes will remain in place after closure of the CAMU; and

(iii) Require notification to the Director and corrective action as necessary to protect human health and the environment for releases to ground water from the CAMU.

(6) Except as provided in Subsection R315-264-552(f), closure and post-closure requirements:

(i) Closure of corrective action management units shall:

(A) Minimize the need for further maintenance; and

(B) Control, minimize, or eliminate, to the extent necessary to protect human health and the environment, for areas where wastes remain in place, post-closure escape of hazardous wastes, hazardous constituents, leachate, contaminated runoff, or hazardous waste decomposition products to the ground, to surface waters, or to the atmosphere.

(ii) Requirements for closure of CAMUs shall include the following, as appropriate and as deemed necessary by the Director for a given CAMU:

(A) Requirements for excavation, removal, treatment or containment of wastes; and

(B) Requirements for removal and decontamination of equipment, devices, and structures used in CAMU-eligible waste management activities within the CAMU.

(iii) In establishing specific closure requirements for CAMUs under Subsection R315-264-552(e), the Director shall consider the following factors:

(A) CAMU characteristics;

(B) Volume of wastes which remain in place after closure;

(C) Potential for releases from the CAMU;

(D) Physical and chemical characteristics of the waste;

(E) Hydrogeological and other relevant environmental conditions at the facility which may influence the migration of any potential or actual releases; and

(F) Potential for exposure of humans and environmental receptors if releases were to occur from the CAMU.

(iv) Cap requirements:

(A) At final closure of the CAMU, for areas in which wastes will remain after closure of the CAMU, with constituent concentrations at or above remedial levels or goals applicable to the site, the owner or operator shall cover the CAMU with a final cover designed and constructed to meet the following performance criteria, except as provided in Subsection R315-264-552(e)(6)(iv)(B):

(1) Provide long-term minimization of migration of liquids through the closed unit;

(2) Function with minimum maintenance;

(3) Promote drainage and minimize erosion or abrasion of the cover;

(4) Accommodate settling and subsidence so that the cover's integrity is maintained; and

(5) Have a permeability less than or equal to the permeability of any bottom liner system or natural subsoils present.

(B) The Director may determine that modifications to Subsection R315-264-552(e)(6)(iv)(A) are needed to facilitate treatment or the performance of the CAMU, e.g., to promote biodegradation.

(v) Post-closure requirements as necessary to protect human health and the environment, to include, for areas where wastes will remain in place, monitoring and maintenance activities, and the frequency with which such activities shall be

performed to ensure the integrity of any cap, final cover, or other containment system.

(f) CAMUs used for storage and/or treatment only are CAMUs in which wastes will not remain after closure. Such CAMUs shall be designated in accordance with all of the requirements of Section R315-264-552, except as follows.

(1) CAMUs that are used for storage and/or treatment only and that operate in accordance with the time limits established in the staging pile regulations at Subsections R315-264-554(d)(1)(iii), (h), and (i) are subject to the requirements for staging piles at Subsections R315-264-554(d)(1)(i) and (ii), (d)(2), (e) and (f), (j), and (k) in lieu of the performance standards and requirements for CAMUs in Subsections R315-264-552(c) and (e)(3) through (6).

(2) CAMUs that are used for storage and/or treatment only and that do not operate in accordance with the time limits established in the staging pile regulations at Subsections R315-264-554(d)(1)(iii), (h), and (i):

(i) Shall operate in accordance with a time limit, established by the Director, that is no longer than necessary to achieve a timely remedy selected for the waste, and

(ii) Are subject to the requirements for staging piles at Subsection R315-264-554(d)(1)(i) and (ii), (d)(2), (e) and (f), (j), and (k) in lieu of the performance standards and requirements for CAMUs in Subsection R315-264-552(c) and (e)(4) and (6).

(g) CAMUs into which wastes are placed where all wastes have constituent levels at or below remedial levels or goals applicable to the site do not have to comply with the requirements for liners at Subsection R315-264-552(e)(3)(i), caps at Subsection R315-264-552(e)(6)(iv), ground water monitoring requirements at Subsection R315-264-552(e)(5) or, for treatment and/or storage-only CAMUs, the design standards at Subsection R315-264-552(f).

(h) The Director shall provide public notice and a reasonable opportunity for public comment before designating a CAMU. Such notice shall include the rationale for any proposed adjustments under Subsection R315-264-552(e)(4)(v) to the treatment standards in Subsection R315-264-552(e)(4)(iv).

(i) Notwithstanding any other provision of Section R315-264-552, the Director may impose additional requirements as necessary to protect human health and the environment.

(j) Incorporation of a CAMU into an existing permit shall be approved by the Director according to the procedures for permit modifications under Section R315-270-41, or according to the permit modification procedures of Section R315-270-42.

(k) The designation of a CAMU does not change the Director's existing authority to address clean-up levels, media-specific points of compliance to be applied to remediation at a facility, or other remedy selection decisions.

R315-264-553. Temporary Units (TU).

(a) For temporary tanks and container storage areas used to treat or store hazardous remediation wastes during remedial activities required under Section R315-264-101 or RCRA 3008(h), or at a permitted facility that is not subject to Section R315-264-101, the Director may designate a unit at the facility, as a temporary unit. A temporary unit shall be located within the contiguous property under the control of the owner/operator where the wastes to be managed in the temporary unit originated. For temporary units, the Director may replace the design, operating, or closure standard applicable to these units under Rule R315-264 or 265 with alternative requirements which protect human health and the environment.

(b) Any temporary unit to which alternative requirements are applied in accordance with Subsection R315-264-553(a) shall be:

- (1) Located within the facility boundary; and

- (2) Used only for treatment or storage of remediation wastes.

(c) In establishing standards to be applied to a temporary unit, the Director shall consider the following factors:

- (1) Length of time such unit will be in operation;
- (2) Type of unit;
- (3) Volumes of wastes to be managed;
- (4) Physical and chemical characteristics of the wastes to be managed in the unit;

- (5) Potential for releases from the unit;
- (6) Hydrogeological and other relevant environmental conditions at the facility which may influence the migration of any potential releases; and

- (7) Potential for exposure of humans and environmental receptors if releases were to occur from the unit.

(d) The Director shall specify in the permit or order the length of time a temporary unit will be allowed to operate, to be no longer than a period of one year. The Director shall also specify the design, operating, and closure requirements for the unit.

(e) The Director may extend the operational period of a temporary unit once for no longer than a period of one year beyond that originally specified in the permit or order, if the Director determines that:

- (1) Continued operation of the unit will not pose a threat to human health and the environment; and

- (2) Continued operation of the unit is necessary to ensure timely and efficient implementation of remedial actions at the facility.

(f) Incorporation of a temporary unit or a time extension for a temporary unit into an existing permit shall be:

- (1) Approved in accordance with the procedures for permit modifications under Section R315-270-41; or

- (2) Requested by the owner/operator as a Class II modification according to the procedures under Section R315-270-42.

(g) The Director shall document the rationale for designating a temporary unit and for granting time extensions for temporary units and shall make such documentation available to the public.

R315-264-554. Staging Piles.

Section R315-264-554 is written in a special format to make it easier to understand the regulatory requirements. Like other regulations, this establishes enforceable legal requirements. For Section R315-264-554 "I" and "you" refer to the owner/operator.

(a) What is a staging pile? A staging pile is an accumulation of solid, non-flowing remediation waste, as defined in Section R315-260-10, that is not a containment building and is used only during remedial operations for temporary storage at a facility. A staging pile shall be located within the contiguous property under the control of the owner/operator where the wastes to be managed in the staging pile originated. Staging piles shall be designated by the Director according to the requirements in Section R315-264-554.

(1) For the purposes of Section R315-264-554, storage includes mixing, sizing, blending, or other similar physical operations as long as they are intended to prepare the wastes for subsequent management or treatment.

(b) When may I use a staging pile? You may use a staging pile to store hazardous remediation waste, or remediation waste otherwise subject to land disposal restrictions, only if you follow the standards and design criteria the Director has designated for that staging pile. The Director shall designate the staging pile in a permit or, at an interim status facility, in a closure plan or order, consistent with Subsections R315-270-72(a)(5) and (b)(5). The Director shall establish conditions in

the permit, closure plan, or order that comply with Subsection R315-264-554(d) through (k).

(c) What information shall I provide to get a staging pile designated? When seeking a staging pile designation, you shall provide:

(1) Sufficient and accurate information to enable the Director to impose standards and design criteria for your staging pile according to Section R315-264-554(d) through (k);

(2) Certification by a qualified Professional Engineer for technical data, such as design drawings and specifications, and engineering studies, unless the Director determines, based on information that you provide, that this certification is not necessary to ensure that a staging pile will protect human health and the environment; and

(3) Any additional information the Director determines is necessary to protect human health and the environment.

(d) What performance criteria shall a staging pile satisfy? The Director shall establish the standards and design criteria for the staging pile in the permit, closure plan, or order.

(1) The standards and design criteria shall comply with the following:

(i) The staging pile shall facilitate a reliable, effective and protective remedy;

(ii) The staging pile shall be designed so as to prevent or minimize releases of hazardous wastes and hazardous constituents into the environment, and minimize or adequately control cross-media transfer, as necessary to protect human health and the environment, for example, through the use of liners, covers, run-off/run-on controls, as appropriate; and

(iii) The staging pile shall not operate for more than two years, except when the Director grants an operating term extension under Subsection R315-264-554(i), entitled "May I receive an operating extension for a staging pile?". You shall measure the two-year limit, or other operating term specified by the Director in the permit, closure plan, or order, from the first time you place remediation waste into a staging pile. You shall maintain a record of the date when you first placed remediation waste into the staging pile for the life of the permit, closure plan, or order, or for three years, whichever is longer.

(2) In setting the standards and design criteria, the Director shall consider the following factors:

(i) Length of time the pile will be in operation;

(ii) Volumes of wastes you intend to store in the pile;

(iii) Physical and chemical characteristics of the wastes to be stored in the unit;

(iv) Potential for releases from the unit;

(v) Hydrogeological and other relevant environmental conditions at the facility that may influence the migration of any potential releases; and

(vi) Potential for human and environmental exposure to potential releases from the unit;

(e) May a staging pile receive ignitable or reactive remediation waste? You shall not place ignitable or reactive remediation waste in a staging pile unless:

(1) You have treated, rendered or mixed the remediation waste before you placed it in the staging pile so that:

(i) The remediation waste no longer meets the definition of ignitable or reactive under Sections R315-261-21 or 23; and

(ii) You have complied with Subsection R315-264-17(b);

or

(2) You manage the remediation waste to protect it from exposure to any material or condition that may cause it to ignite or react.

(f) How do I handle incompatible remediation wastes in a staging pile? The term "incompatible waste" is defined in Section R315-260-10. You shall comply with the following requirements for incompatible wastes in staging piles:

(1) You shall not place incompatible remediation wastes in the same staging pile unless you have complied with

Subsection R315-264-17(b);

(2) If remediation waste in a staging pile is incompatible with any waste or material stored nearby in containers, other piles, open tanks or land disposal units, for example, surface impoundments, you shall separate the incompatible materials, or protect them from one another by using a dike, berm, wall or other device; and

(3) You shall not pile remediation waste on the same base where incompatible wastes or materials were previously piled, unless the base has been decontaminated sufficiently to comply with Subsection R315-264-17(b).

(g) Are staging piles subject to Land Disposal Restrictions and Minimum Technological Requirements? No. Placing hazardous remediation wastes into a staging pile does not constitute land disposal of hazardous wastes or create a unit that is subject to the minimum technological requirements of RCRA 3004(o).

(h) How long may I operate a staging pile? The Director may allow a staging pile to operate for up to two years after hazardous remediation waste is first placed into the pile. You shall use a staging pile no longer than the length of time designated by the Director in the permit, closure plan, or order, the "operating term", except as provided in Subsection R315-264-554(i).

(i) May I receive an operating extension for a staging pile?

(1) The Director may grant one operating term extension of up to 180 days beyond the operating term limit contained in the permit, closure plan, or order, see Subsection R315-264-554(l) for modification procedures. To justify to the Director the need for an extension, you shall provide sufficient and accurate information to enable the Director to determine that continued operation of the staging pile:

(i) Will not pose a threat to human health and the environment; and

(ii) Is necessary to ensure timely and efficient implementation of remedial actions at the facility.

(2) The Director may, as a condition of the extension, specify further standards and design criteria in the permit, closure plan, or order, as necessary, to ensure protection of human health and the environment.

(j) What is the closure requirement for a staging pile located in a previously contaminated area?

(1) Within 180 days after the operating term of the staging pile expires, you shall close a staging pile located in a previously contaminated area of the site by removing or decontaminating all:

(i) Remediation waste;

(ii) Contaminated containment system components; and

(iii) Structures and equipment contaminated with waste and leachate.

(2) You shall also decontaminate contaminated subsoils in a manner and according to a schedule that the Director determines will protect human health and the environment.

(3) The Director shall include the above requirements in the permit, closure plan, or order in which the staging pile is designated.

(k) What is the closure requirement for a staging pile located in an uncontaminated area?

(1) Within 180 days after the operating term of the staging pile expires, you shall close a staging pile located in an uncontaminated area of the site according to Subsections R315-264-258(a) and 264-111; or according to 40 CFR 265.258(a) and 265.111, which are adopted by reference.

(2) The Director shall include the above requirement in the permit, closure plan, or order in which the staging pile is designated.

(l) How may my existing permit, for example, Remedial Action Plan, closure plan, or order be modified to allow me to use a staging pile?

(1) To modify a permit, other than a Remedial Action Plan, to incorporate a staging pile or staging pile operating term extension, either:

(i) The Director shall approve the modification under the procedures for permit modifications in Section R315-270-41; or

(ii) You shall request a Class 2 modification under Section R315-270-42.

(2) To modify a Remedial Action Plan to incorporate a staging pile or staging pile operating term extension, you shall comply with the Remedial Action Plan modification requirements under Sections R315-270-170 and 175.

(3) To modify a closure plan to incorporate a staging pile or staging pile operating term extension, you shall follow the applicable requirements under Section R315-264-112(c) or 40 CFR 265.112(c), which is adopted by reference.

(4) To modify an order to incorporate a staging pile or staging pile operating term extension, you shall follow the terms of the order and the applicable provisions of Subsection R315-270-72(a)(5) or (b)(5).

(m) Is information about the staging pile available to the public? The Director shall document the rationale for designating a staging pile or staging pile operating term extension and make this documentation available to the public.

R315-264-555. Disposal of CAMU-Eligible Wastes in Permitted Hazardous Waste Landfills.

(a) The Director may approve placement of CAMU-eligible wastes in hazardous waste landfills not located at the site from which the waste originated, without the wastes meeting the requirements of Rule R315-268, if the conditions in Subsections R315-264-555(a)(1) through (3) are met:

(1) The waste meets the definition of CAMU-eligible waste in Subsection R315-264-552(a)(1) and (2).

(2) The Director identifies principal hazardous constituents in such waste, in accordance with Subsection R315-264-552(e)(4)(i) and (ii), and requires that such principal hazardous constituents are treated to any of the following standards specified for CAMU-eligible wastes:

(i) The treatment standards under Subsection R315-264-552(e)(4)(iv); or

(ii) Treatment standards adjusted in accordance with Subsection R315-264-552(e)(4)(v)(A), (C), (D) or (E)(I); or

(iii) Treatment standards adjusted in accordance with Subsection R315-264-552(e)(4)(v)(E)(II), where treatment has been used and that treatment significantly reduces the toxicity or mobility of the principal hazardous constituents in the waste, minimizing the short-term and long-term threat posed by the waste, including the threat at the remediation site.

(3) The landfill receiving the CAMU-eligible waste shall have a permit issued under Section 19-6-108, meet the requirements for new landfills in Sections R315-264-300 through 317, and be authorized to accept CAMU-eligible wastes; for the purposes of this requirement, "permit" does not include interim status.

(b) The person seeking approval shall provide sufficient information to enable the Director to approve placement of CAMU-eligible waste in accordance with Subsection R315-264-555(a). Information required by Subsections R315-264-552(d)(1) through (3) for CAMU applications shall be provided, unless not reasonably available.

(c) The Director shall provide public notice and a reasonable opportunity for public comment before approving CAMU eligible waste for placement in an off-site permitted hazardous waste landfill, consistent with the requirements for CAMU approval at Subsection R315-264-552(h). The approval shall be specific to a single remediation.

(d) Applicable hazardous waste management requirements in Rule R315-264, including recordkeeping requirements to demonstrate compliance with treatment standards approved

under Section R315-264-555, for CAMU-eligible waste shall be incorporated into the receiving facility permit through permit issuance or a permit modification, providing notice and an opportunity for comment and a hearing. Notwithstanding Subsection R315-270-4(a), a landfill may not receive hazardous CAMU-eligible waste under Section R315-264-555 unless its permit specifically authorizes receipt of such waste.

(e) For each remediation, CAMU-eligible waste may not be placed in an off-site landfill authorized to receive CAMU-eligible waste in accordance with Subsection R315-264-555(d) until the following additional conditions have been met:

(1) The landfill owner/operator notifies the Director and persons on the facility mailing list, maintained in accordance with Subsection R315-124-10(c)(1)(ix), of his or her intent to receive CAMU-eligible waste in accordance with Section R315-264-555; the notice shall identify the source of the remediation waste, the principal hazardous constituents in the waste, and treatment requirements.

(2) Persons on the facility mailing list may provide comments, including objections to the receipt of the CAMU-eligible waste, to the Director within 15 days of notification.

(3) The Director may object to the placement of the CAMU-eligible waste in the landfill within 30 days of notification; the Director may extend the review period an additional 30 days because of public concerns or insufficient information.

(4) CAMU-eligible wastes may not be placed in the landfill until the Director has notified the facility owner/operator that he or she does not object to its placement.

(5) If the Director objects to the placement or does not notify the facility owner/operator that he or she has chosen not to object, the facility may not receive the waste, notwithstanding Subsection R315-270-4(a), until the objection has been resolved, or the owner/operator obtains a permit modification in accordance with the procedures of Section R315-270-42 specifically authorizing receipt of the waste.

(6) As part of the permit issuance or permit modification process of Subsection R315-264-555(d), the Director may modify, reduce, or eliminate the notification requirements of Subsection R315-264-555(e) as they apply to specific categories of CAMU-eligible waste, based on minimal risk.

(f) Generators of CAMU-eligible wastes sent off-site to a hazardous waste landfill under Section R315-264-555 shall comply with the requirements of Subsection R315-268-7(a)(4); off-site facilities treating CAMU-eligible wastes to comply with Section R315-264-555 shall comply with the requirements of Subsection R315-268-7(b)(4), except that the certification shall be with respect to the treatment requirements of Subsection R315-264-555(a)(2).

(g) For the purposes of Section R315-264-555 only, the "design of the CAMU" in Subsection R315-264-552(e)(4)(v)(E) means design of the permitted hazardous waste landfill.

R315-264-570. Drip Pads -- Applicability.

(a) The requirements of Sections R315-264-570 through 575 apply to owners and operators of facilities that use new or existing drip pads to convey treated wood drippage, precipitation, and/or surface water run-off to an associated collection system. Existing drip pads are those constructed before December 6, 1990 and those for which the owner or operator has a design and has entered into binding financial or other agreements for construction prior to December 6, 1990 for all HSWA drip pads or July 30, 1993 for all non-HSWA drip pads. All other drip pads are new drip pads. The requirement at Subsection R315-264-573(b)(3) to install a leak collection system applies only to those drip pads that are constructed after December 24, 1992 except for those constructed after December 24, 1992 for which the owner or operator has a design and has entered into binding financial or other agreements for

construction prior to December 24, 1992 for all HSWA drip pads or July 30, 1993 for all non-HSWA drip pads.

(b) The owner or operator of any drip pad that is inside or under a structure that provides protection from precipitation so that neither run-off nor run-on is generated is not subject to regulation under Subsection R315-264-573(e) or Subsection R315-264-573(f), as appropriate.

(c) The requirements of Sections R315-264-570 through 575 are not applicable to the management of infrequent and incidental drippage in storage yards provided that:

(1) The owner or operator maintains and complies with a written contingency plan that describes how the owner or operator will respond immediately to the discharge of such infrequent and incidental drippage. At a minimum, the contingency plan shall describe how the owner or operator will do the following:

- (i) Clean up the drippage;
- (ii) Document the cleanup of the drippage;
- (iii) Retain documents regarding cleanup for three years;

and

(iv) Manage the contaminated media in a manner consistent with Utah regulations.

R315-264-571. Assessment of Existing Drip Pad Integrity.

(a) For each existing drip pad as defined in Subsection R315-264-570, the owner or operator shall evaluate the drip pad and determine whether it meets all of the requirements of Sections R315-264-570 through 575, except the requirements for liners and leak detection systems of Subsection R315-264-573(b). The owner or operator shall obtain and keep on file at the facility a written assessment of the drip pad, reviewed and certified by a qualified Professional Engineer that attests to the results of the evaluation. The assessment shall be reviewed, updated and re-certified annually until all upgrades, repairs, or modifications necessary to achieve compliance with all the standards of Section R315-264-573 are complete. The evaluation shall document the extent to which the drip pad meets each of the design and operating standards of Section R315-264-573, except the standards for liners and leak detection systems, specified in Subsection R315-264-573(b).

(b) The owner or operator shall develop a written plan for upgrading, repairing, and modifying the drip pad to meet the requirements of Subsection R315-264-573(b) and submit the plan to the Director no later than 2 years before the date that all repairs, upgrades, and modifications are complete. This written plan shall describe all changes to be made to the drip pad in sufficient detail to document compliance with all the requirements of Section R315-264-573. The plan shall be reviewed and certified by a qualified Professional Engineer.

(c) Upon completion of all upgrades, repairs, and modifications, the owner or operator shall submit to the Director, the as-built drawings for the drip pad together with a certification by a qualified Professional Engineer attesting that the drip pad conforms to the drawings.

(d) If the drip pad is found to be leaking or unfit for use, the owner or operator shall comply with the provisions of Subsection R315-264-573(m) or close the drip pad in accordance with Section R315-264-575.

R315-264-572. Design and Installation of New Drip Pads.

Owners and operators of new drip pads shall ensure that the pads are designed, installed, and operated in accordance with one of the following:

(a) all of the requirements of Section R315-264-573, except 573(a)(4) and Subsections R315-264-574 and 575, or

(b) all of the requirements of Sections R315-264-573, except 573(b), 574 and 575.

R315-264-573. Design and Operating Requirements.

(a) Drip pads shall:

(1) Be constructed of non-earthen materials, excluding wood and non-structurally supported asphalt;

(2) Be sloped to free-drain treated wood drippage, rain and other waters, or solutions of drippage and water or other wastes to the associated collection system;

(3) Have a curb or berm around the perimeter;

(4)(i) Have a hydraulic conductivity of less than or equal to 1×10^{-7} centimeters per second, e.g., existing concrete drip pads shall be sealed, coated, or covered with a surface material with a hydraulic conductivity of less than or equal to 1×10^{-7} centimeters per second such that the entire surface where drippage occurs or may run across is capable of containing such drippage and mixtures of drippage and precipitation, materials, or other wastes while being routed to an associated collection system. This surface material shall be maintained free of cracks and gaps that could adversely affect its hydraulic conductivity, and the material shall be chemically compatible with the preservatives that contact the drip pad. The requirements of this provision apply only to existing drip pads and those drip pads for which the owner or operator elects to comply with Subsection R315-264-572(b) instead of Subsection R315-264-572(a).

(ii) The owner or operator shall obtain and keep on file at the facility a written assessment of the drip pad, reviewed and certified by a qualified Professional Engineer that attests to the results of the evaluation. The assessment shall be reviewed, updated and recertified annually. The evaluation shall document the extent to which the drip pad meets the design and operating standards of Section R315-264-573, except for Subsection R315-264-573(b).

(5) Be of sufficient structural strength and thickness to prevent failure due to physical contact, climatic conditions, the stress of daily operations, e.g., variable and moving loads such as vehicle traffic, movement of wood, etc.

Note: The Director will generally consider applicable standards established by professional organizations generally recognized by the industry such as the American Concrete Institute or the American Society of Testing and Materials in judging the structural integrity requirement of Subsection R315-264-573(a).

(b) If an owner/operator elects to comply with Subsection R315-264-572(a) instead of Subsection R315-264-572(b), the drip pad shall have:

(1) A synthetic liner installed below the drip pad that is designed, constructed, and installed to prevent leakage from the drip pad into the adjacent subsurface soil or groundwater or surface water at any time during the active life, including the closure period, of the drip pad. The liner shall be constructed of materials that will prevent waste from being absorbed into the liner and to prevent releases into the adjacent subsurface soil or groundwater or surface water during the active life of the facility. The liner shall be:

(i) Constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients, including static head and external hydrogeologic forces; physical contact with the waste or drip pad leakage to which they are exposed; climatic conditions; the stress of installation; and the stress of daily operation, including stresses from vehicular traffic on the drip pad;

(ii) Placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression or uplift; and

(iii) Installed to cover all surrounding earth that could come in contact with the waste or leakage; and

(2) A leakage detection system immediately above the liner that is designed, constructed, maintained and operated to

detect leakage from the drip pad. The leakage detection system shall be:

- (i) Constructed of materials that are:
 - (A) Chemically resistant to the waste managed in the drip pad and the leakage that might be generated; and
 - (B) Of sufficient strength and thickness to prevent collapse under the pressures exerted by overlaying materials and by any equipment used at the drip pad;
 - (ii) Designed and operated to function without clogging through the scheduled closure of the drip pad; and
 - (iii) Designed so that it will detect the failure of the drip pad or the presence of a release of hazardous waste or accumulated liquid at the earliest practicable time.
- (3) A leakage collection system immediately above the liner that is designed, constructed, maintained and operated to collect leakage from the drip pad such that it can be removed from below the drip pad. The date, time, and quantity of any leakage collected in this system and removed shall be documented in the operating log.
- (c) Drip pads shall be maintained such that they remain free of cracks, gaps, corrosion, or other deterioration that could cause hazardous waste to be released from the drip pad.
- Note: See Subsection R315-264-573(m) for remedial action required if deterioration or leakage is detected.
- (d) The drip pad and associated collection system shall be designed and operated to convey, drain, and collect liquid resulting from drippage or precipitation in order to prevent run-off.
- (e) Unless protected by a structure, as described in Subsection R315-264-570(b), the owner or operator shall design, construct, operate and maintain a run-on control system capable of preventing flow onto the drip pad during peak discharge from at least a 24-hour, 25-year storm, unless the system has sufficient excess capacity to contain any run-off that might enter the system.
- (f) Unless protected by a structure or cover as described in Subsection R315-264-570(b), the owner or operator shall design, construct, operate and maintain a run-off management system to collect and control at least the water volume resulting from a 24-hour, 25-year storm.
- (g) The drip pad shall be evaluated to determine that it meets the requirements of Subsections R315-264-573(a) through (f) and the owner or operator shall obtain a statement from a qualified Professional Engineer certifying that the drip pad design meets the requirements of Section R315-264-573.
- (h) Dripping and accumulated precipitation shall be removed from the associated collection system as necessary to prevent overflow onto the drip pad.
- (i) The drip pad surface shall be cleaned thoroughly in a manner and frequency such that accumulated residues of hazardous waste or other materials are removed, with residues being properly managed as hazardous waste, so as to allow weekly inspections of the entire drip pad surface without interference or hindrance from accumulated residues of hazardous waste or other materials on the drip pad. The owner or operator shall document the date and time of each cleaning and the cleaning procedure used in the facility's operating log. The owner/operator shall determine if the residues are hazardous as per Section R315-262-11 and, if so, shall manage them under Rules R315-261 through 268, 270, and section 3010 of RCRA.
- (j) Drip pads shall be operated and maintained in a manner to minimize tracking of hazardous waste or hazardous waste constituents off the drip pad as a result of activities by personnel or equipment.

(k) After being removed from the treatment vessel, treated wood from pressure and non-pressure processes shall be held on the drip pad until drippage has ceased. The owner or operator shall maintain records sufficient to document that all treated wood is held on the pad following treatment in accordance with

this requirement.

(l) Collection and holding units associated with run-on and run-off control systems shall be emptied or otherwise managed as soon as possible after storms to maintain design capacity of the system.

(m) Throughout the active life of the drip pad and as specified in the permit, if the owner or operator detects a condition that may have caused or has caused a release of hazardous waste, the condition shall be repaired within a reasonable prompt period of time following discovery, in accordance with the following procedures:

(1) Upon detection of a condition that may have caused or has caused a release of hazardous waste, e.g., upon detection of leakage in the leak detection system, the owner or operator shall:

(i) Enter a record of the discovery in the facility operating log;

(ii) Immediately remove the portion of the drip pad affected by the condition from service;

(iii) Determine what steps shall be taken to repair the drip pad and clean up any leakage from below the drip pad, and establish a schedule for accomplishing the repairs;

(iv) Within 24 hours after discovery of the condition, notify the Director of the condition and, within 10 working days, provide written notice to the Director with a description of the steps that will be taken to repair the drip pad and clean up any leakage, and the schedule for accomplishing this work.

(2) The Director shall review the information submitted, make a determination regarding whether the pad shall be removed from service completely or partially until repairs and cleanup are complete and notify the owner or operator of the determination and the underlying rationale in writing.

(3) Upon completing all repairs and cleanup, the owner or operator shall notify the Director in writing and provide a certification signed by an independent, qualified registered professional engineer, that the repairs and cleanup have been completed according to the written plan submitted in accordance with Subsection R315-264-573(m)(1)(iv).

(n) Should a permit be necessary, the Director shall specify in the permit all design and operating practices that are necessary to ensure that the requirements of Section R315-264-573 are satisfied.

(o) The owner or operator shall maintain, as part of the facility operating log, documentation of past operating and waste handling practices. This shall include identification of preservative formulations used in the past, a description of drippage management practices, and a description of treated wood storage and handling practices.

R315-264-574. Inspections.

(a) During construction or installation, liners and cover systems, e.g., membranes, sheets, or coatings, shall be inspected for uniformity, damage and imperfections, e.g., holes, cracks, thin spots, or foreign materials. Immediately after construction or installation, liners shall be inspected and certified as meeting the requirements in Section R315-264-573 by a qualified Professional Engineer. This certification shall be maintained at the facility as part of the facility operating record. After installation, liners and covers shall be inspected to ensure tight seams and joints and the absence of tears, punctures, or blisters.

(b) While a drip pad is in operation, it shall be inspected weekly and after storms to detect evidence of any of the following:

(1) Deterioration, malfunctions or improper operation of run-on and run-off control systems;

(2) The presence of leakage in and proper functioning of leak detection system.

(3) Deterioration or cracking of the drip pad surface.

Note: See Section R315-264-573(m) for remedial action

required if deterioration or leakage is detected.

R315-264-575. Closure.

(a) At closure, the owner or operator shall remove or decontaminate all waste residues, contaminated containment system components, pad, liners, etc., contaminated subsoils, and structures and equipment contaminated with waste and leakage, and manage them as hazardous waste.

(b) If, after removing or decontaminating all residues and making all reasonable efforts to effect removal or decontamination of contaminated components, subsoils, structures, and equipment as required in Subsection R315-264-575(a), the owner or operator finds that not all contaminated subsoils can be practicably removed or decontaminated, he shall close the facility and perform post-closure care in accordance with closure and post-closure care requirements that apply to landfills, Section R315-264-310. For permitted units, the requirement to have a permit continues throughout the post-closure period. In addition, for the purpose of closure, post-closure, and financial responsibility, such a drip pad is then considered to be landfill, and the owner or operator shall meet all of the requirements for landfills specified in Sections R315-264-110 through 120 and 140 through 151.

(c)(1) The owner or operator of an existing drip pad, as defined in Section R315-264-570, that does not comply with the liner requirements of Subsection R315-264-573(b)(1) shall:

(i) Include in the closure plan for the drip pad under Section R315-264-112 both a plan for complying with Subsection R315-264-575(a) and a contingent plan for complying with Subsection R315-264-575(b) in case not all contaminated subsoils can be practicably removed at closure; and

(ii) Prepare a contingent post-closure plan under Section R315-264-118 for complying with Subsection R315-264-575(b) in case not all contaminated subsoils can be practicably removed at closure.

(2) The cost estimates calculated under Sections R315-264-112 and 144 for closure and post-closure care of a drip pad subject to Subsection R315-264-575(c) shall include the cost of complying with the contingent closure plan and the contingent post-closure plan, but are not required to include the cost of expected closure under Subsection R315-264-575(a).

R315-264-600. Miscellaneous Units -- Applicability.

The requirements in Sections R315-264-600 through 603 apply to owners and operators of facilities that treat, store, or dispose of hazardous waste in miscellaneous units, except as Section R315-264-1 provides otherwise.

R315-264-601. Environmental Performance Standards.

A miscellaneous unit shall be located, designed, constructed, operated, maintained, and closed in a manner that will ensure protection of human health and the environment. Permits for miscellaneous units are to contain such terms and provisions as necessary to protect human health and the environment, including, but not limited to, as appropriate, design and operating requirements, detection and monitoring requirements, and requirements for responses to releases of hazardous waste or hazardous constituents from the unit. Permit terms and provisions shall include those requirements of Sections R315-264-170 through 179, 190 through 200, 220 through 232, 250 through 259, 270 through 283, 300 through 317, 340 through 351, 1030 through 1036, 1050 through 1065, 1080 through 1090, Rule 270, Subsection R307-214-2(39), and Rule R317-7 that are appropriate for the miscellaneous unit being permitted. Protection of human health and the environment includes, but is not limited to:

(a) Prevention of any releases that may have adverse effects on human health or the environment due to migration of

waste constituents in the ground water or subsurface environment, considering:

(1) The volume and physical and chemical characteristics of the waste in the unit, including its potential for migration through soil, liners, or other containing structures;

(2) The hydrologic and geologic characteristics of the unit and the surrounding area;

(3) The existing quality of ground water, including other sources of contamination and their cumulative impact on the ground water;

(4) The quantity and direction of ground-water flow;

(5) The proximity to and withdrawal rates of current and potential ground-water users;

(6) The patterns of land use in the region;

(7) The potential for deposition or migration of waste constituents into subsurface physical structures, and into the root zone of food-chain crops and other vegetation;

(8) The potential for health risks caused by human exposure to waste constituents; and

(9) The potential for damage to domestic animals, wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents;

(b) Prevention of any releases that may have adverse effects on human health or the environment due to migration of waste constituents in surface water, or wetlands or on the soil surface considering:

(1) The volume and physical and chemical characteristics of the waste in the unit;

(2) The effectiveness and reliability of containing, confining, and collecting systems and structures in preventing migration;

(3) The hydrologic characteristics of the unit and the surrounding area, including the topography of the land around the unit;

(4) The patterns of precipitation in the region;

(5) The quantity, quality, and direction of ground-water flow;

(6) The proximity of the unit to surface waters;

(7) The current and potential uses of nearby surface waters and any water quality standards established for those surface waters;

(8) The existing quality of surface waters and surface soils, including other sources of contamination and their cumulative impact on surface waters and surface soils;

(9) The patterns of land use in the region;

(10) The potential for health risks caused by human exposure to waste constituents; and

(11) The potential for damage to domestic animals, wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents.

(c) Prevention of any release that may have adverse effects on human health or the environment due to migration of waste constituents in the air, considering:

(1) The volume and physical and chemical characteristics of the waste in the unit, including its potential for the emission and dispersal of gases, aerosols and particulates;

(2) The effectiveness and reliability of systems and structures to reduce or prevent emissions of hazardous constituents to the air;

(3) The operating characteristics of the unit;

(4) The atmospheric, meteorologic, and topographic characteristics of the unit and the surrounding area;

(5) The existing quality of the air, including other sources of contamination and their cumulative impact on the air;

(6) The potential for health risks caused by human exposure to waste constituents; and

(7) The potential for damage to domestic animals, wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents.

R315-264-602. Monitoring, Analysis, Inspection, Response, Reporting, and Corrective Action.

Monitoring, testing, analytical data, inspections, response, and reporting procedures and frequencies shall ensure compliance with Sections R315-264-601, 15, 33, 75, 76, 77, and 101 as well as meet any additional requirements needed to protect human health and the environment as specified in the permit.

R315-264-603. Post-Closure Care.

A miscellaneous unit that is a disposal unit shall be maintained in a manner that complies with Section R315-264-601 during the post-closure care period. In addition, if a treatment or storage unit has contaminated soils or ground water that cannot be completely removed or decontaminated during closure, then that unit shall also meet the requirements of Section R315-264-601 during post-closure care. The post-closure plan under Section R315-264-118 shall specify the procedures that will be used to satisfy this requirement.

R315-264-1030. Air Emission Standards for Process Vents -- Applicability.

(a) The regulations in Sections R315-1030 through 1036 apply to owners and operators of facilities that treat, store, or dispose of hazardous wastes, except as provided in Section R315-264-1.

(b) Except for Subsections R315-264-1034(d) and (e), Sections R315-1030 through 1036 apply to process vents associated with distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations that manage hazardous wastes with organic concentrations of at least 10 ppmw, if these operations are conducted in one of the following:

(1) A unit that is subject to the permitting requirements of Rule R315-270, or

(2) A unit, including a hazardous waste recycling unit, that is not exempt from permitting under the provisions of Section R315-262-17, i.e., a hazardous waste recycling unit that is not a 90-day tank or container, and that is located at a hazardous waste management facility otherwise subject to the permitting requirements of Rule R315-270, or

(3) A unit that is exempt from permitting under the provisions of Subsection R315-262-34(a), i.e., a "90-day" tank or container, and is not a recycling unit under the provisions of Section R315-261-6.

(c) For the owner and operator of a facility subject to Sections R315-264-1030 through R315-264-1036 and who received a final permit under Section 19-6-108 prior to December 6, 1996, the requirements of Sections R315-264-1030 through 1036 shall be incorporated into the permit when the permit is reissued in accordance with the requirements of Section R315-124-15 or reviewed in accordance with the requirements of Subsection R315-270-50(d). Until such date when the owner and operator receive a final permit incorporating the requirements of Sections R315-264-1030 through R315-264-1036, the owner and operator are subject to the requirements of 40 CFR 265.1030 through 265.1035, which is adopted by reference in Section R315-265-1.

Note: The requirements of Sections R315-264-1032 through 1036 apply to process vents on hazardous waste recycling units previously exempt under Subsection R315-261-6(c)(1). Other exemptions under Section R315-261-4, and Subsection R35-264-1(g) are not affected by these requirements.

(d) The requirements of Subpart AA 40 CFR do not apply to the pharmaceutical manufacturing facility, commonly referred to as the Stonewall Plant, located at Route 340 South, Elkton, Virginia, provided that facility is operated in compliance with the requirements contained in a permit issued pursuant to 40 CFR 52.2454. The requirements of Subpart AA 40 CFR shall

apply to the facility upon termination of the permit issued pursuant to the 40 CFR 52.2454.

(e) The requirements of Sections R315-264-1030 through 1036 do not apply to the process vents at a facility where the facility owner or operator certifies that all of the process vents that would otherwise be subject to Sections R315-264-1030 through 1036 are equipped with and operating air emission controls in accordance with the process vent requirements of an applicable regulation codified under the Utah Air Conservation Act. The documentation of compliance under regulations codified under the Utah Air Conservation Act shall be kept with, or made readily available with, the facility operating record.

R315-264-1031. Definitions.

As used in Sections R315-264-1030 through 1036, all terms not defined herein shall have the meaning given them in RCRA and Rules R315-260 through 266.

(a) Air stripping operation is a desorption operation employed to transfer one or more volatile components from a liquid mixture into a gas (air) either with or without the application of heat to the liquid. Packed towers, spray towers, and bubble-cap, sieve, or valve-type plate towers are among the process configurations used for contacting the air and a liquid.

(b) Bottoms receiver means a container or tank used to receive and collect the heavier bottoms fractions of the distillation feed stream that remain in the liquid phase.

(c) Closed-vent system means a system that is not open to the atmosphere and that is composed of piping, connections, and, if necessary, flow-inducing devices that transport gas or vapor from a piece or pieces of equipment to a control device.

(d) Condenser means a heat-transfer device that reduces a thermodynamic fluid from its vapor phase to its liquid phase.

(e) Connector means flanged, screwed, welded, or other joined fittings used to connect two pipelines or a pipeline and a piece of equipment. For the purposes of reporting and recordkeeping, connector means flanged fittings that are not covered by insulation or other materials that prevent location of the fittings.

(f) Continuous recorder means a data-recording device recording an instantaneous data value at least once every 15 minutes.

(g) Control device means an enclosed combustion device, vapor recovery system, or flare. Any device the primary function of which is the recovery or capture of solvents or other organics for use, reuse, or sale, e.g., a primary condenser on a solvent recovery unit, is not a control device.

(h) Control device shutdown means the cessation of operation of a control device for any purpose.

(i) Distillate receiver means a container or tank used to receive and collect liquid material (condensed) from the overhead condenser of a distillation unit and from which the condensed liquid is pumped to larger storage tanks or other process units.

(j) Distillation operation means an operation, either batch or continuous, separating one or more feed stream(s) into two or more exit streams, each exit stream having component concentrations different from those in the feed stream(s). The separation is achieved by the redistribution of the components between the liquid and vapor phase as they approach equilibrium within the distillation unit.

(k) Double block and bleed system means two block valves connected in series with a bleed valve or line that can vent the line between the two block valves.

(l) Equipment means each valve, pump, compressor, pressure relief device, sampling connection system, open-ended valve or line, or flange or other connector, and any control devices or systems required by Sections R315-264-1030 through 1036.

(m) Flame zone means the portion of the combustion chamber in a boiler occupied by the flame envelope.

(n) Flow indicator means a device that indicates whether gas flow is present in a vent stream.

(o) First attempt at repair means to take rapid action for the purpose of stopping or reducing leakage of organic material to the atmosphere using best practices.

(p) Fractionation operation means a distillation operation or method used to separate a mixture of several volatile components of different boiling points in successive stages, each stage removing from the mixture some proportion of one of the components.

(q) Hazardous waste management unit shutdown means a work practice or operational procedure that stops operation of a hazardous waste management unit or part of a hazardous waste management unit. An unscheduled work practice or operational procedure that stops operation of a hazardous waste management unit or part of a hazardous waste management unit for less than 24 hours is not a hazardous waste management unit shutdown. The use of spare equipment and technically feasible bypassing of equipment without stopping operation are not hazardous waste management unit shutdowns.

(r) Hot well means a container for collecting condensate as in a steam condenser serving a vacuum-jet or steam-jet ejector.

(s) In gas/vapor service means that the piece of equipment contains or contacts a hazardous waste stream that is in the gaseous state at operating conditions.

(t) In heavy liquid service means that the piece of equipment is not in gas/vapor service or in light liquid service.

(u) In light liquid service means that the piece of equipment contains or contacts a waste stream where the vapor pressure of one or more of the organic components in the stream is greater than 0.3 kilopascals (kPa) at 20 degrees C, the total concentration of the pure organic components having a vapor pressure greater than 0.3 kilopascals (kPa) at 20 degrees C is equal to or greater than 20 percent by weight, and the fluid is a liquid at operating conditions.

(v) In situ sampling systems means nonextractive samplers or in-line samplers.

(w) In vacuum service means that equipment is operating at an internal pressure that is at least 5 kPa below ambient pressure.

(x) Malfunction means any sudden failure of a control device or a hazardous waste management unit or failure of a hazardous waste management unit to operate in a normal or usual manner, so that organic emissions are increased.

(y) Open-ended valve or line means any valve, except pressure relief valves, having one side of the valve seat in contact with hazardous waste and one side open to the atmosphere, either directly or through open piping.

(z) Pressure release means the emission of materials resulting from the system pressure being greater than the set pressure of the pressure relief device.

(aa) Process heater means a device that transfers heat liberated by burning fuel to fluids contained in tubes, including all fluids except water that are heated to produce steam.

(bb) Process vent means any open-ended pipe or stack that is vented to the atmosphere either directly, through a vacuum-producing system, or through a tank (e.g., distillate receiver, condenser, bottoms receiver, surge control tank, separator tank, or hot well) associated with hazardous waste distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations.

(cc) Repaired means that equipment is adjusted, or otherwise altered, to eliminate a leak.

(dd) Sampling connection system means an assembly of equipment within a process or waste management unit used during periods of representative operation to take samples of the process or waste fluid. Equipment used to take non-routine grab

samples is not considered a sampling connection system.

(ee) Sensor means a device that measures a physical quantity or the change in a physical quantity, such as temperature, pressure, flow rate, pH, or liquid level.

(ff) Separator tank means a device used for separation of two immiscible liquids.

(gg) Solvent extraction operation means an operation or method of separation in which a solid or solution is contacted with a liquid solvent, the two being mutually insoluble, to preferentially dissolve and transfer one or more components into the solvent.

(hh) Startup means the setting in operation of a hazardous waste management unit or control device for any purpose.

(ii) Steam stripping operation means a distillation operation in which vaporization of the volatile constituents of a liquid mixture takes place by the introduction of steam directly into the charge.

(jj) Surge control tank means a large-sized pipe or storage reservoir sufficient to contain the surging liquid discharge of the process tank to which it is connected.

(kk) Thin-film evaporation operation means a distillation operation that employs a heating surface consisting of a large diameter tube that may be either straight or tapered, horizontal or vertical. Liquid is spread on the tube wall by a rotating assembly of blades that maintain a close clearance from the wall or actually ride on the film of liquid on the wall.

(ll) Vapor incinerator means any enclosed combustion device that is used for destroying organic compounds and does not extract energy in the form of steam or process heat.

(mm) Vented means discharged through an opening, typically an open-ended pipe or stack, allowing the passage of a stream of liquids, gases, or fumes into the atmosphere. The passage of liquids, gases, or fumes is caused by mechanical means such as compressors or vacuum-producing systems or by process-related means such as evaporation produced by heating and not caused by tank loading and unloading, working losses, or by natural means such as diurnal temperature changes.

R315-264-1032. Standards: Process Vents.

(a) The owner or operator of a facility with process vents associated with distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations managing hazardous wastes with organic concentrations of at least 10 ppmw shall either:

(1) Reduce total organic emissions from all affected process vents at the facility below 1.4 kg/h (3 lb/h) and 2.8 Mg/yr (3.1 tons/yr), or

(2) Reduce, by use of a control device, total organic emissions from all affected process vents at the facility by 95 weight percent.

(b) If the owner or operator installs a closed-vent system and control device to comply with the provisions of Subsection R315-264-1032(a) the closed-vent system and control device shall meet the requirements of Section R315-264-1033.

(c) Determinations of vent emissions and emission reductions or total organic compound concentrations achieved by add-on control devices may be based on engineering calculations or performance tests. If performance tests are used to determine vent emissions, emission reductions, or total organic compound concentrations achieved by add-on control devices, the performance tests shall conform with the requirements of Subsection R315-264-1034(c).

(d) When an owner or operator and the Director do not agree on determinations of vent emissions and/or emission reductions or total organic compound concentrations achieved by add-on control devices based on engineering calculations, the procedures in Subsection R315-264-1034(c) shall be used to resolve the disagreement.

R315-264-1033. Standards: Closed-Vent Systems and Control Devices.

(a)(1) Owners or operators of closed-vent systems and control devices used to comply with provisions of Sections R315-264-1030 through 1036 shall comply with the provisions of Section R315-264-1033.

(2)(i) The owner or operator of an existing facility who cannot install a closed-vent system and control device to comply with the provisions of Sections R315-264-1030 through 1036 on the effective date that the facility becomes subject to the provisions of Sections R315-264-1030 through 1036 shall prepare an implementation schedule that includes dates by which the closed-vent system and control device will be installed and in operation. The controls shall be installed as soon as possible, but the implementation schedule may allow up to 30 months after the effective date that the facility becomes subject to Sections R315-264-1030 through 1036 for installation and startup.

(ii) Any unit that begins operation after December 21, 1990, and is subject to the provisions of Sections R315-264-1030 through 1036 when operation begins, shall comply with the rules immediately, i.e., shall have control devices installed and operating on startup of the affected unit; the 30-month implementation schedule does not apply.

(iii) The owner or operator of any facility in existence on the effective date of a statutory or regulatory amendment that renders the facility subject to Sections R315-264-1030 through 1036 shall comply with all requirements of Sections R315-264-1030 through 1036 as soon as practicable but no later than 30 months after the amendment's effective date. When control equipment required by Sections R315-264-1030 through 1036 cannot be installed and begin operation by the effective date of the amendment, the facility owner or operator shall prepare an implementation schedule that includes the following information: Specific calendar dates for award of contracts or issuance of purchase orders for the control equipment, initiation of on-site installation of the control equipment, completion of the control equipment installation, and performance of any testing to demonstrate that the installed equipment meets the applicable standards of Sections R315-264-1030 through 1036. The owner or operator shall enter the implementation schedule in the operating record or in a permanent, readily available file located at the facility.

(iv) Owners and operators of facilities and units that become newly subject to the requirements of Sections R315-264-1030 through 1036 after December 8, 1997, due to an action other than those described in Subsection R315-264-1033(a)(2)(iii) shall comply with all applicable requirements immediately, i.e., shall have control devices installed and operating on the date the facility or unit becomes subject to Sections R315-264-1030 through 1036; the 30-month implementation schedule does not apply.

(b) A control device involving vapor recovery, e.g., a condenser or adsorber, shall be designed and operated to recover the organic vapors vented to it with an efficiency of 95 weight percent or greater unless the total organic emission limits of Subsection R315-264-1032(a)(1) for all affected process vents can be attained at an efficiency less than 95 weight percent.

(c) An enclosed combustion device, e.g., a vapor incinerator, boiler, or process heater, shall be designed and operated to reduce the organic emissions vented to it by 95 weight percent or greater; to achieve a total organic compound concentration of 20 ppmv, expressed as the sum of the actual compounds, not carbon equivalents, on a dry basis corrected to 3 percent oxygen; or to provide a minimum residence time of 0.50 seconds at a minimum temperature of 760 degrees C. If a boiler or process heater is used as the control device, then the vent stream shall be introduced into the flame zone of the boiler or process heater.

(d)(1) A flare shall be designed for and operated with no visible emissions as determined by the methods specified in Subsection R315-264-1033(e)(1), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

(2) A flare shall be operated with a flame present at all times, as determined by the methods specified in Subsection R315-264-1033(f)(2)(iii).

(3) A flare shall be used only if the net heating value of the gas being combusted is 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or if the net heating value of the gas being combusted is 7.45 MJ/scm (200 Btu/scf) or greater if the flare is nonassisted. The net heating value of the gas being combusted shall be determined by the methods specified in Subsection R315-264-1033(e)(2).

(4)(i) A steam-assisted or nonassisted flare shall be designed for and operated with an exit velocity, as determined by the methods specified in Subsection R315-264-1033(e)(3), less than 18.3 m/s (60 ft/s), except as provided in Subsections R315-264-133(d)(4)(ii) and (iii).

(ii) A steam-assisted or nonassisted flare designed for and operated with an exit velocity, as determined by the methods specified in Subsection R315-264-1033(e)(3), equal to or greater than 18.3 m/s (60 ft/s) but less than 122 m/s (400 ft/s) is allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).

(iii) A steam-assisted or nonassisted flare designed for and operated with an exit velocity, as determined by the methods specified in Subsection R315-264-1033(e)(3), less than the velocity, V_{max} , as determined by the method specified in Subsection R315-264-1033(e)(4) and less than 122 m/s (400 ft/s) is allowed.

(5) An air-assisted flare shall be designed and operated with an exit velocity less than the velocity, V_{max} , as determined by the method specified in Subsection R315-264-1033(e)(5).

(6) A flare used to comply with Section R315-24-1033 shall be steam-assisted, air-assisted, or nonassisted.

(e)(1) Reference Method 22 in 40 CFR part 60 shall be used to determine the compliance of a flare with the visible emission provisions of Sections R315-264-1030 through 1036. The observation period is 2 hours and shall be used according to Method 22.

(2) The net heating value of the gas being combusted in a flare shall be calculated using the following equation:

$H_t = K$ times the summation product of C_i and H_i from i equals 1 to n

where:

H_t = Net heating value of the sample, MJ/scm; where the net enthalpy per mole of offgas is based on combustion at 25 degrees C and 760 mm Hg, but the standard temperature for determining the volume corresponding to 1 mol is 20 degrees C;

K = Constant, 1.74×10^{-7} (1/ppm) (g mol/scm) (MJ/kcal) where standard temperature for (g mol/scm) is 20 degrees C;

C_i = Concentration of sample component i in ppm on a wet basis, as measured for organics by Reference Method 18 in 40 CFR part 60 and measured for hydrogen and carbon monoxide by ASTM D 1946-82, incorporated by reference as specified in Section R315-260-11; and

H_i = Net heat of combustion of sample component i , kcal/9 mol at 25 degrees C and 760 mm Hg. The heats of combustion may be determined using ASTM D 2382-83, incorporated by reference as specified in Section R315-260-11, if published values are not available or cannot be calculated.

(3) The actual exit velocity of a flare shall be determined by dividing the volumetric flow rate, in units of standard temperature and pressure, as determined by Reference Methods 2, 2A, 2C, or 2D in 40 CFR part 60 as appropriate, by the unobstructed (free) cross-sectional area of the flare tip.

(4) The maximum allowed velocity in m/s, V_{max} , for a

flare complying with Subsection R315-264-1033(d)(4)(iii) shall be determined by the following equation:

$$\text{Log}_{10}(\text{Vmax}) = (\text{HT} + 28.8) / 31.7$$

where:

28.8 = Constant,

31.7 = Constant,

HT = The net heating value as determined in Subsection R315-264-1033(e)(2).

(5) The maximum allowed velocity in m/s, Vmax, for an air-assisted flare shall be determined by the following equation:

$$\text{Vmax} = 8.706 + 0.7084 (\text{HT})$$

where:

8.706 = Constant,

0.7084 = Constant,

HT = The net heating value as determined in Subsection R315-264-1033(e)(2).

(f) The owner or operator shall monitor and inspect each control device required to comply with Section R315-264-1033 to ensure proper operation and maintenance of the control device by implementing the following requirements:

(1) Install, calibrate, maintain, and operate according to the manufacturer's specifications a flow indicator that provides a record of vent stream flow from each affected process vent to the control device at least once every hour. The flow indicator sensor shall be installed in the vent stream at the nearest feasible point to the control device inlet but before the point at which the vent streams are combined.

(2) Install, calibrate, maintain, and operate according to the manufacturer's specifications a device to continuously monitor control device operation as specified below:

(i) For a thermal vapor incinerator, a temperature monitoring device equipped with a continuous recorder. The device shall have an accuracy of plus or minus 1 percent of the temperature being monitored in degrees C or +/- 0.5 degrees C, whichever is greater. The temperature sensor shall be installed at a location in the combustion chamber downstream of the combustion zone.

(ii) For a catalytic vapor incinerator, a temperature monitoring device equipped with a continuous recorder. The device shall be capable of monitoring temperature at two locations and have an accuracy of plus or minus 1 percent of the temperature being monitored in degrees C or +/- 0.5 degrees C, whichever is greater. One temperature sensor shall be installed in the vent stream at the nearest feasible point to the catalyst bed inlet and a second temperature sensor shall be installed in the vent stream at the nearest feasible point to the catalyst bed outlet.

(iii) For a flare, a heat sensing monitoring device equipped with a continuous recorder that indicates the continuous ignition of the pilot flame.

(iv) For a boiler or process heater having a design heat input capacity less than 44 MW, a temperature monitoring device equipped with a continuous recorder. The device shall have an accuracy of plus or minus 1 percent of the temperature being monitored in degrees C or plus or minus 0.5 degrees C, whichever is greater. The temperature sensor shall be installed at a location in the furnace downstream of the combustion zone.

(v) For a boiler or process heater having a design heat input capacity greater than or equal to 44 MW, a monitoring device equipped with a continuous recorder to measure a parameter(s) that indicates good combustion operating practices are being used.

(vi) For a condenser, either:

(A) A monitoring device equipped with a continuous recorder to measure the concentration level of the organic compounds in the exhaust vent stream from the condenser, or

(B) A temperature monitoring device equipped with a continuous recorder. The device shall be capable of monitoring temperature with an accuracy of plus or minus 1 percent of the

temperature being monitored in degrees Celsius, or plus or minus 0.5 degrees C, whichever is greater. The temperature sensor shall be installed at a location in the exhaust vent stream from the condenser exit, i.e., product side.

(vii) For a carbon adsorption system that regenerates the carbon bed directly in the control device such as a fixed-bed carbon adsorber, either:

(A) A monitoring device equipped with a continuous recorder to measure the concentration level of the organic compounds in the exhaust vent stream from the carbon bed, or

(B) A monitoring device equipped with a continuous recorder to measure a parameter that indicates the carbon bed is regenerated on a regular, predetermined time cycle.

(3) Inspect the readings from each monitoring device required by Subsections R315-24-1033(f)(1) and (2) at least once each operating day to check control device operation and, if necessary, immediately implement the corrective measures necessary to ensure the control device operates in compliance with the requirements of Section R315-264-1033.

(g) An owner or operator using a carbon adsorption system such as a fixed-bed carbon adsorber that regenerates the carbon bed directly onsite in the control device shall replace the existing carbon in the control device with fresh carbon at a regular, predetermined time interval that is no longer than the carbon service life established as a requirement of Subsection R315-264-1035(b)(4)(iii)(F).

(h) An owner or operator using a carbon adsorption system such as a carbon canister that does not regenerate the carbon bed directly onsite in the control device shall replace the existing carbon in the control device with fresh carbon on a regular basis by using one of the following procedures:

(1) Monitor the concentration level of the organic compounds in the exhaust vent stream from the carbon adsorption system on a regular schedule, and replace the existing carbon with fresh carbon immediately when carbon breakthrough is indicated. The monitoring frequency shall be daily or at an interval no greater than 20 percent of the time required to consume the total carbon working capacity established as a requirement of Subsection R315-264-1035(b)(4)(iii)(G), whichever is longer.

(2) Replace the existing carbon with fresh carbon at a regular, predetermined time interval that is less than the design carbon replacement interval established as a requirement of Subsection R315-264-1035(b)(4)(iii)(G).

(i) An alternative operational or process parameter may be monitored if it can be demonstrated that another parameter will ensure that the control device is operated in conformance with these standards and the control device's design specifications.

(j) An owner or operator of an affected facility seeking to comply with the provisions of Rule R315-264 by using a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system is required to develop documentation including sufficient information to describe the control device operation and identify the process parameter or parameters that indicate proper operation and maintenance of the control device.

(k) A closed-vent system shall meet either of the following design requirements:

(1) A closed-vent system shall be designed to operate with no detectable emissions, as indicated by an instrument reading of less than 500 ppmv above background as determined by the procedure in Subsection R315-264-1034(b), and by visual inspections; or

(2) A closed-vent system shall be designed to operate at a pressure below atmospheric pressure. The system shall be equipped with at least one pressure gauge or other pressure measurement device that can be read from a readily accessible location to verify that negative pressure is being maintained in the closed-vent system when the control device is operating.

(l) The owner or operator shall monitor and inspect each closed-vent system required to comply with Section R315-264-1033 to ensure proper operation and maintenance of the closed-vent system by implementing the following requirements:

(1) Each closed-vent system that is used to comply with Subsection R315-264-1033(k)(1) shall be inspected and monitored in accordance with the following requirements:

(i) An initial leak detection monitoring of the closed-vent system shall be conducted by the owner or operator on or before the date that the system becomes subject to Section R315-264-1033. The owner or operator shall monitor the closed-vent system components and connections using the procedures specified in Subsection R315-264-1034(b) to demonstrate that the closed-vent system operates with no detectable emissions, as indicated by an instrument reading of less than 500 ppmv above background.

(ii) After initial leak detection monitoring required in Subsection R315-264-1033(l)(1)(i), the owner or operator shall inspect and monitor the closed-vent system as follows:

(A) Closed-vent system joints, seams, or other connections that are permanently or semi-permanently sealed, e.g., a welded joint between two sections of hard piping or a bolted and gasketed ducting flange, shall be visually inspected at least once per year to check for defects that could result in air pollutant emissions. The owner or operator shall monitor a component or connection using the procedures specified in Subsection R315-264-1034(b) to demonstrate that it operates with no detectable emissions following any time the component is repaired or replaced, e.g., a section of damaged hard piping is replaced with new hard piping, or the connection is unsealed, e.g., a flange is unbolted.

(B) Closed-vent system components or connections other than those specified in Subsection R315-264-1033(l)(1)(ii)(A) shall be monitored annually and at other times as requested by the Director, except as provided for in Subsection R315-264-1033(o), using the procedures specified in Subsection R315-264-1034(b) to demonstrate that the components or connections operate with no detectable emissions.

(iii) In the event that a defect or leak is detected, the owner or operator shall repair the defect or leak in accordance with the requirements of Subsection R315-264-1033(l)(3).

(iv) The owner or operator shall maintain a record of the inspection and monitoring in accordance with the requirements specified in Subsection R315-264-1035.

(2) Each closed-vent system that is used to comply with Subsection R315-264-1033(k)(2) shall be inspected and monitored in accordance with the following requirements:

(i) The closed-vent system shall be visually inspected by the owner or operator to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in ductwork or piping or loose connections.

(ii) The owner or operator shall perform an initial inspection of the closed-vent system on or before the date that the system becomes subject to Section R315-264-1033. Thereafter, the owner or operator shall perform the inspections at least once every year.

(iii) In the event that a defect or leak is detected, the owner or operator shall repair the defect in accordance with the requirements of Subsection R315-264-1033(l)(3).

(iv) The owner or operator shall maintain a record of the inspection and monitoring in accordance with the requirements specified in Subsection R315-264-1035.

(3) The owner or operator shall repair all detected defects as follows:

(i) Detectable emissions, as indicated by visual inspection, or by an instrument reading greater than 500 ppmv above background, shall be controlled as soon as practicable, but not later than 15 calendar days after the emission is detected, except

as provided for in Subsection R315-264-1033(l)(3)(iii).

(ii) A first attempt at repair shall be made no later than 5 calendar days after the emission is detected.

(iii) Delay of repair of a closed-vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown, or if the owner or operator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be completed by the end of the next process unit shutdown.

(iv) The owner or operator shall maintain a record of the defect repair in accordance with the requirements specified in Section R315-264-1035.

(m) Closed-vent systems and control devices used to comply with provisions of Sections R315-264-1033 through 1036 shall be operated at all times when emissions may be vented to them.

(n) The owner or operator using a carbon adsorption system to control air pollutant emissions shall document that all carbon that is a hazardous waste and that is removed from the control device is managed in one of the following manners, regardless of the average volatile organic concentration of the carbon:

(1) Regenerated or reactivated in a thermal treatment unit that meets one of the following:

(i) The owner or operator of the unit has been issued a final permit under Rule R315-270 which implements the requirements of Sections R315-264-600 through 603; or

(ii) The unit is equipped with and operating air emission controls in accordance with the applicable requirements of Sections R315-264-1030 through 1036 and 1080 through 1090 or 40 CFR 265.1030 through 1035 and 1080 through 1090, which are adopted by reference; or

(iii) The unit is equipped with and operating air emission controls in accordance with a national emission standard for hazardous air pollutants under Section R315-307-214-1, which incorporates 40 CFR part 61 or Section R307-214-2, which incorporates 40 CFR part 63.

(2) Incinerated in a hazardous waste incinerator for which the owner or operator either:

(i) Has been issued a final permit under Rule R315-270 which implements the requirements of Sections R315-264-340 through 351; or

(ii) Has designed and operates the incinerator in accordance with the interim status requirements of 40 CFR 265.340 through 352, which are adopted by reference.

(3) Burned in a boiler or industrial furnace for which the owner or operator either:

(i) Has been issued a final permit under Rule R315-270 which implements the requirements of Sections R315-266-100 through 112; or

(ii) Has designed and operates the boiler or industrial furnace in accordance with the interim status requirements of Sections R315-266-100 through 112.

(o) Any components of a closed-vent system that are designated, as described in Subsection R315-264-1035(c)(9), as unsafe to monitor are exempt from the requirements of Subsection R315-264-1033(l)(1)(ii)(B) if:

(1) The owner or operator of the closed-vent system determines that the components of the closed-vent system are unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with Subsection R315-264-1033(l)(1)(ii)(B); and

(2) The owner or operator of the closed-vent system adheres to a written plan that requires monitoring the closed-vent system components using the procedure specified in Subsection R315-264-1033(l)(1)(ii)(B) as frequently as practicable during safe-to-monitor times.

R315-264-1034. Test Methods and Procedures.

(a) Each owner or operator subject to the provisions of Sections R315-264-1030 through 1036 shall comply with the test methods and procedures requirements provided in Section R315-264-1034.

(b) When a closed-vent system is tested for compliance with no detectable emissions, as required in Subsection R315-264-1033(l), the test shall comply with the following requirements:

(1) Monitoring shall comply with Reference Method 21 in 40 CFR part 60.

(2) The detection instrument shall meet the performance criteria of Reference Method 21.

(3) The instrument shall be calibrated before use on each day of its use by the procedures specified in Reference Method 21.

(4) Calibration gases shall be:

(i) Zero air, less than 10 ppm of hydrocarbon in air.

(ii) A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.

(5) The background level shall be determined as set forth in Reference Method 21.

(6) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21.

(7) The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

(c) Performance tests to determine compliance with Subsection R315-264-1032(a) and with the total organic compound concentration limit of Subsection R315-264-1033(c) shall comply with the following:

(1) Performance tests to determine total organic compound concentrations and mass flow rates entering and exiting control devices shall be conducted and data reduced in accordance with the following reference methods and calculation procedures:

(i) Method 2 in 40 CFR part 60 for velocity and volumetric flow rate.

(ii) Method 18 or Method 25A in 40 CFR part 60, appendix A, for organic content. If Method 25A is used, the organic HAP used as the calibration gas shall be the single organic HAP representing the largest percent by volume of the emissions. The use of Method 25A is acceptable if the response from the high-level calibration gas is at least 20 times the standard deviation of the response from the zero calibration gas when the instrument is zeroed on the most sensitive scale.

(iii) Each performance test shall consist of three separate runs; each run conducted for at least 1 hour under the conditions that exist when the hazardous waste management unit is operating at the highest load or capacity level reasonably expected to occur. For the purpose of determining total organic compound concentrations and mass flow rates, the average of results of all runs shall apply. The average shall be computed on a time-weighted basis.

(iv) Total organic mass flow rates shall be determined by the following equation:

(A) For sources utilizing Method 18.

The equation found in 40 CFR 264.1034(c)(1)(iv)(A), 2015 edition, is adopted and incorporated by reference.

Where:

Eh = Total organic mass flow rate, kg/h;

Q2sd = Volumetric flow rate of gases entering or exiting control device, as determined by Method 2, dscm/h;

n = Number of organic compounds in the vent gas;

Ci = Organic concentration in ppm, dry basis, of compound i in the vent gas, as determined by Method 18;

MW_i = Molecular weight of organic compound i in the vent gas, kg/kg-mol;

0.0416 = Conversion factor for molar volume, kg-mol/m³, at 293 K and 760 mm Hg;

10⁻⁶ = Conversion from ppm

(B) For sources utilizing Method 25A.

Eh = (Q)(C)(MW)(0.0416)(10⁻⁶)

Where:

Eh = Total organic mass flow rate, kg/h;

Q = Volumetric flow rate of gases entering or exiting control device, as determined by Method 2, dscm/h;

C = Organic concentration in ppm, dry basis, as determined by Method 25A;

MW = Molecular weight of propane, 44;

0.0416 = Conversion factor for molar volume, kg-mol/m³, at 293 K and 760 mm Hg;

10⁻⁶ = Conversion from ppm.

(v) The annual total organic emission rate shall be determined by the following equation:

EA = (Eh)(H)

where:

EA = Total organic mass emission rate, kg/y;

Eh = Total organic mass flow rate for the process vent, kg/h;

H = Total annual hours of operations for the affected unit, h.

(vi) Total organic emissions from all affected process vents at the facility shall be determined by summing the hourly total organic mass emission rates, Eh as determined in Subsection R315-264-1034(c)(1)(iv), and by summing the annual total organic mass emission rates, EA, as determined in Subsection R315-264-1034(c)(1)(v), for all affected process vents at the facility.

(2) The owner or operator shall record such process information as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test.

(3) The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

(i) Sampling ports adequate for the test methods specified in Subsection R315-264-1034(c)(1).

(ii) Safe sampling platform(s).

(iii) Safe access to sampling platform(s).

(iv) Utilities for sampling and testing equipment.

(4) For the purpose of making compliance determinations, the time-weighted average of the results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs shall be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the owner or operator's control, compliance may, upon the Director's approval, be determined using the average of the results of the two other runs.

(d) To show that a process vent associated with a hazardous waste distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operation is not subject to the requirements of Sections R315-264-1030 through 1036, the owner or operator shall make an initial determination that the time-weighted, annual average total organic concentration of the waste managed by the waste management unit is less than 10 ppmw using one of the following two methods:

(1) Direct measurement of the organic concentration of the waste using the following procedures:

(i) The owner or operator shall take a minimum of four grab samples of waste for each waste stream managed in the affected unit under process conditions expected to cause the maximum waste organic concentration.

(ii) For waste generated onsite, the grab samples shall be collected at a point before the waste is exposed to the atmosphere such as in an enclosed pipe or other closed system that is used to transfer the waste after generation to the first affected distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operation. For waste generated offsite, the grab samples shall be collected at the inlet to the first waste management unit that receives the waste provided the waste has been transferred to the facility in a closed system such as a tank truck and the waste is not diluted or mixed with other waste.

(iii) Each sample shall be analyzed and the total organic concentration of the sample shall be computed using Method 9060A, incorporated by reference under Section R315-260-11, of "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, or analyzed for its individual organic constituents.

(iv) The arithmetic mean of the results of the analyses of the four samples shall apply for each waste stream managed in the unit in determining the time-weighted, annual average total organic concentration of the waste. The time-weighted average is to be calculated using the annual quantity of each waste stream processed and the mean organic concentration of each waste stream managed in the unit.

(2) Using knowledge of the waste to determine that its total organic concentration is less than 10 ppmw. Documentation of the waste determination is required. Examples of documentation that shall be used to support a determination under this provision include production process information documenting that no organic compounds are used, information that the waste is generated by a process that is identical to a process at the same or another facility that has previously been demonstrated by direct measurement to generate a waste stream having a total organic content less than 10 ppmw, or prior speciation analysis results on the same waste stream where it can also be documented that no process changes have occurred since that analysis that could affect the waste total organic concentration.

(e) The determination that distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations manage hazardous wastes with time-weighted, annual average total organic concentrations less than 10 ppmw shall be made as follows:

(1) By the effective date that the facility becomes subject to the provisions of Sections R315-264-1030 through 1036 or by the date when the waste is first managed in a waste management unit, whichever is later, and

(2) For continuously generated waste, annually, or

(3) Whenever there is a change in the waste being managed or a change in the process that generates or treats the waste.

(f) When an owner or operator and the Director do not agree on whether a distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operation manages a hazardous waste with organic concentrations of at least 10 ppmw based on knowledge of the waste, the dispute may be resolved by using direct measurement as specified at Subsection R315-264-1034(d)(1).

R315-264-1035. Recordkeeping Requirements.

(a)(1) Each owner or operator subject to the provisions of Sections R315-264-1030 through 1036 shall comply with the recordkeeping requirements of Section R315-264-1035.

(2) An owner or operator of more than one hazardous waste management unit subject to the provisions of Sections R315-264-1030 through 1036 may comply with the recordkeeping requirements for these hazardous waste management units in one recordkeeping system if the system identifies each record by each hazardous waste management

unit.

(b) Owners and operators shall record the following information in the facility operating record:

(1) For facilities that comply with the provisions of Subsection R315-264-1033(a)(2), an implementation schedule that includes dates by which the closed-vent system and control device will be installed and in operation. The schedule shall also include a rationale of why the installation cannot be completed at an earlier date. The implementation schedule shall be in the facility operating record by the effective date that the facility becomes subject to the provisions of Sections R315-264-1030 through 1036.

(2) Up-to-date documentation of compliance with the process vent standards in Section R315-264-1032, including:

(i) Information and data identifying all affected process vents, annual throughput and operating hours of each affected unit, estimated emission rates for each affected vent and for the overall facility, i.e., the total emissions for all affected vents at the facility, and the approximate location within the facility of each affected unit, e.g., identify the hazardous waste management units on a facility plot plan.

(ii) Information and data supporting determinations of vent emissions and emission reductions achieved by add-on control devices based on engineering calculations or source tests. For the purpose of determining compliance, determinations of vent emissions and emission reductions shall be made using operating parameter values, e.g., temperatures, flow rates, or vent stream organic compounds and concentrations, that represent the conditions that result in maximum organic emissions, such as when the waste management unit is operating at the highest load or capacity level reasonably expected to occur. If the owner or operator takes any action, e.g., managing a waste of different composition or increasing operating hours of affected waste management units, that would result in an increase in total organic emissions from affected process vents at the facility, then a new determination is required.

(3) Where an owner or operator chooses to use test data to determine the organic removal efficiency or total organic compound concentration achieved by the control device, a performance test plan. The test plan shall include:

(i) A description of how it is determined that the planned test is going to be conducted when the hazardous waste management unit is operating at the highest load or capacity level reasonably expected to occur. This shall include the estimated or design flow rate and organic content of each vent stream and define the acceptable operating ranges of key process and control device parameters during the test program.

(ii) A detailed engineering description of the closed-vent system and control device including:

(A) Manufacturer's name and model number of control device.

(B) Type of control device.

(C) Dimensions of the control device.

(D) Capacity.

(E) Construction materials.

(iii) A detailed description of sampling and monitoring procedures, including sampling and monitoring locations in the system, the equipment to be used, sampling and monitoring frequency, and planned analytical procedures for sample analysis.

(4) Documentation of compliance with Section R315-264-1033 shall include the following information:

(i) A list of all information references and sources used in preparing the documentation.

(ii) Records, including the dates, of each compliance test required by Subsection R315-264-1033(k).

(iii) If engineering calculations are used, a design analysis, specifications, drawings, schematics, and piping and

instrumentation diagrams based on the appropriate sections of "APTI Course 415: Control of Gaseous Emissions," incorporated by reference as specified in Section R315-260-11, or other engineering texts acceptable to the Director that present basic control device design information. Documentation provided by the control device manufacturer or vendor that describes the control device design in accordance with Subsections R315-264-1035(b)(4)(iii)(A) through (b)(4)(iii)(G) may be used to comply with this requirement. The design analysis shall address the vent stream characteristics and control device operation parameters as specified below.

(A) For a thermal vapor incinerator, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also establish the design minimum and average temperature in the combustion zone and the combustion zone residence time.

(B) For a catalytic vapor incinerator, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also establish the design minimum and average temperatures across the catalyst bed inlet and outlet.

(C) For a boiler or process heater, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also establish the design minimum and average flame zone temperatures, combustion zone residence time, and description of method and location where the vent stream is introduced into the combustion zone.

(D) For a flare, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also consider the requirements specified in Subsection R315-264-1033(d).

(E) For a condenser, the design analysis shall consider the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature. The design analysis shall also establish the design outlet organic compound concentration level, design average temperature of the condenser exhaust vent stream, and design average temperatures of the coolant fluid at the condenser inlet and outlet.

(F) For a carbon adsorption system such as a fixed-bed adsorber that regenerates the carbon bed directly onsite in the control device, the design analysis shall consider the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature. The design analysis shall also establish the design exhaust vent stream organic compound concentration level, number and capacity of carbon beds, type and working capacity of activated carbon used for carbon beds, design total steam flow over the period of each complete carbon bed regeneration cycle, duration of the carbon bed steaming and cooling/drying cycles, design carbon bed temperature after regeneration, design carbon bed regeneration time, and design service life of carbon.

(G) For a carbon adsorption system such as a carbon canister that does not regenerate the carbon bed directly onsite in the control device, the design analysis shall consider the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature. The design analysis shall also establish the design outlet organic concentration level, capacity of carbon bed, type and working capacity of activated carbon used for carbon bed, and design carbon replacement interval based on the total carbon working capacity of the control device and source operating schedule.

(iv) A statement signed and dated by the owner or operator certifying that the operating parameters used in the design analysis reasonably represent the conditions that exist when the hazardous waste management unit is or would be operating at the highest load or capacity level reasonably expected to occur.

(v) A statement signed and dated by the owner or operator certifying that the control device is designed to operate at an

efficiency of 95 percent or greater unless the total organic concentration limit of Subsection R315-264-1032(a) is achieved at an efficiency less than 95 weight percent or the total organic emission limits of Subsection R315-264-1032(a) for affected process vents at the facility can be attained by a control device involving vapor recovery at an efficiency less than 95 weight percent. A statement provided by the control device manufacturer or vendor certifying that the control equipment meets the design specifications may be used to comply with this requirement.

(vi) If performance tests are used to demonstrate compliance, all test results.

(c) Design documentation and monitoring, operating, and inspection information for each closed-vent system and control device required to comply with the provisions of Rule R315-264 shall be recorded and kept up-to-date in the facility operating record. The information shall include:

(1) Description and date of each modification that is made to the closed-vent system or control device design.

(2) Identification of operating parameter, description of monitoring device, and diagram of monitoring sensor location or locations used to comply with Subsections R315-264-1033(f)(1) and (f)(2).

(3) Monitoring, operating, and inspection information required by Subsections R315-264-1033(f) through (k).

(4) Date, time, and duration of each period that occurs while the control device is operating when any monitored parameter exceeds the value established in the control device design analysis as specified below:

(i) For a thermal vapor incinerator designed to operate with a minimum residence time of 0.50 second at a minimum temperature of 760 degrees C, period when the combustion temperature is below 760 degrees C.

(ii) For a thermal vapor incinerator designed to operate with an organic emission reduction efficiency of 95 weight percent or greater, period when the combustion zone temperature is more than 28 degrees C below the design average combustion zone temperature established as a requirement of Subsection R315-264-1035(b)(4)(iii)(A).

(iii) For a catalytic vapor incinerator, period when:

(A) Temperature of the vent stream at the catalyst bed inlet is more than 28 degrees C below the average temperature of the inlet vent stream established as a requirement of Subsection R315-264-1035(b)(4)(iii)(B), or

(B) Temperature difference across the catalyst bed is less than 80 percent of the design average temperature difference established as a requirement of Subsection R315-264-1035(b)(4)(iii)(B).

(iv) For a boiler or process heater, period when:

(A) Flame zone temperature is more than 28 degrees C below the design average flame zone temperature established as a requirement of Subsection R315-264-1035(b)(4)(iii)(C), or

(B) Position changes where the vent stream is introduced to the combustion zone from the location established as a requirement of Subsection R315-264-1035(b)(4)(iii)(C).

(v) For a flare, period when the pilot flame is not ignited.

(vi) For a condenser that complies with Subsection R315-264-1033(f)(2)(vi)(A), period when the organic compound concentration level or readings of organic compounds in the exhaust vent stream from the condenser are more than 20 percent greater than the design outlet organic compound concentration level established as a requirement of Subsection R315-264-1035(b)(4)(iii)(E).

(vii) For a condenser that complies with Subsection R315-264-1033(f)(2)(vi)(B), period when:

(A) Temperature of the exhaust vent stream from the condenser is more than 6 degrees C above the design average exhaust vent stream temperature established as a requirement of Subsection R315-264-1035(b)(4)(iii)(E); or

(B) Temperature of the coolant fluid exiting the condenser is more than 6 degrees C above the design average coolant fluid temperature at the condenser outlet established as a requirement of Subsection R315-264-1035(b)(4)(iii)(E).

(viii) For a carbon adsorption system such as a fixed-bed carbon adsorber that regenerates the carbon bed directly onsite in the control device and complies with Subsection R315-264-1033(f)(2)(vii)(A), period when the organic compound concentration level or readings of organic compounds in the exhaust vent stream from the carbon bed are more than 20 percent greater than the design exhaust vent stream organic compound concentration level established as a requirement of Subsection R315-264-1035(b)(4)(iii)(F).

(ix) For a carbon adsorption system such as a fixed-bed carbon adsorber that regenerates the carbon bed directly onsite in the control device and complies with Subsection R315-264-1033(f)(2)(vii)(B), period when the vent stream continues to flow through the control device beyond the predetermined carbon bed regeneration time established as a requirement of Subsection R315-264-1035(b)(4)(iii)(F).

(5) Explanation for each period recorded under Subsection R315-264-1035(4) of the cause for control device operating parameter exceeding the design value and the measures implemented to correct the control device operation.

(6) For a carbon adsorption system operated subject to requirements specified in Subsection R315-264-1033(g) or (h)(2), date when existing carbon in the control device is replaced with fresh carbon.

(7) For a carbon adsorption system operated subject to requirements specified in Subsection R315-264-1033(h)(1), a log that records:

(i) Date and time when control device is monitored for carbon breakthrough and the monitoring device reading.

(ii) Date when existing carbon in the control device is replaced with fresh carbon.

(8) Date of each control device startup and shutdown.

(9) An owner or operator designating any components of a closed-vent system as unsafe to monitor pursuant to Subsection R315-264-1033(o) shall record in a log that is kept in the facility operating record the identification of closed-vent system components that are designated as unsafe to monitor in accordance with the requirements of Subsection R315-264-1033(o), an explanation for each closed-vent system component stating why the closed-vent system component is unsafe to monitor, and the plan for monitoring each closed-vent system component.

(10) When each leak is detected as specified in Subsection R315-264-1033(l), the following information shall be recorded:

(i) The instrument identification number, the closed-vent system component identification number, and the operator name, initials, or identification number.

(ii) The date the leak was detected and the date of first attempt to repair the leak.

(iii) The date of successful repair of the leak.

(iv) Maximum instrument reading measured by Method 21 of 40 CFR part 60, appendix A after it is successfully repaired or determined to be nonrepairable.

(v) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.

(A) The owner or operator may develop a written procedure that identifies the conditions that justify a delay of repair. In such cases, reasons for delay of repair may be documented by citing the relevant sections of the written procedure.

(B) If delay of repair was caused by depletion of stocked parts, there shall be documentation that the spare parts were sufficiently stocked on-site before depletion and the reason for depletion.

(d) Records of the monitoring, operating, and inspection information required by Subsections R315-264-1035(c)(3) through (c)(10) shall be maintained by the owner or operator for at least 3 years following the date of each occurrence, measurement, maintenance, corrective action, or record.

(e) For a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system, the Director shall specify the appropriate recordkeeping requirements.

(f) Up-to-date information and data used to determine whether or not a process vent is subject to the requirements in Section R315-264-1032 including supporting documentation as required by Subsection R315-264-1034(d)(2) when application of the knowledge of the nature of the hazardous waste stream or the process by which it was produced is used, shall be recorded in a log that is kept in the facility operating record.

R315-264-1036. Reporting Requirements.

(a) A semiannual report shall be submitted by owners and operators subject to the requirements of Sections R315-264-1030 through 1036 to the Director by dates specified by the Director. The report shall include the following information:

(1) The Environmental Protection Agency identification number, name, and address of the facility.

(2) For each month during the semiannual reporting period, dates when the control device exceeded or operated outside of the design specifications as defined in Subsection R315-264-1035(c)(4) and as indicated by the control device monitoring required by Subsection R315-264-1033(f) and such exceedances were not corrected within 24 hours, or that a flare operated with visible emissions as defined in Subsection R315-264-1033(d) and as determined by Method 22 monitoring, the duration and cause of each exceedance or visible emissions, and any corrective measures taken.

(b) If, during the semiannual reporting period, the control device does not exceed or operate outside of the design specifications as defined in Subsection R315-264-264-1035(c)(4) for more than 24 hours or a flare does not operate with visible emissions as defined in Subsection R315-264-264-1033(d), a report to the Director is not required.

R315-264-1050. Air Emission Standards for Equipment Leaks -- Applicability.

(a) The regulations in Sections R315-264-1050 through 1065 apply to owners and operators of facilities that treat, store, or dispose of hazardous wastes, except as provided in Section R315-264-1.

(b) Except as provided in Subsection R315-264-1064(k), Sections R315-264-1050 through 1065 apply to equipment that contains or contacts hazardous wastes with organic concentrations of at least 10 percent by weight that are managed in one of the following:

(1) A unit that is subject to the permitting requirements of Rule R315-270, or

(2) A unit, including a hazardous waste recycling unit, that is not exempt from permitting under the provisions of Subsection R315-262-34(a), i.e., a hazardous waste recycling unit that is not a "90-day" tank or container, and that is located at a hazardous waste management facility otherwise subject to the permitting requirements of Rule R315-270, or

(3) A unit that is exempt from permitting under the provisions of Section R315-262-17, i.e., a "90-day" tank or container, and is not a recycling unit under the provisions of Section R315-261-6.

(c) For the owner or operator of a facility subject to Sections R315-264-1050 through 1065 and who received a final permit under RCRA section 3005 prior to December 6, 1996, the requirements of Sections R315-264-1050 through 1065 shall be incorporated into the permit when the permit is reissued in

accordance with the requirements of Section R315-124-15 or reviewed in accordance with the requirements of Subsection R315-270-50(d). Until such date when the owner or operator receives a final permit incorporating the requirements of Sections R315-264-1050 through 1065, the owner or operator is subject to the requirements of 40 CFR 265.1050 through 265.1064, which are adopted by reference in Section R315-265-1.

(d) Each piece of equipment to which Sections R315-264-1050 through 1065 applies shall be marked in such a manner that it can be distinguished readily from other pieces of equipment.

(e) Equipment that is in vacuum service is excluded from the requirements of Sections R315-264-1052 through R315-264-1060 if it is identified as required in Subsection R315-264-1064(g)(5).

(f) Equipment that contains or contacts hazardous waste with an organic concentration of at least 10 percent by weight for less than 300 hours per calendar year is excluded from the requirements of Sections R315-264-1052 through 1060 if it is identified, as required in Subsection R315-264-1064(g)(6).

(g) The requirements of Subpart BB 40 CFR do not apply to the pharmaceutical manufacturing facility, commonly referred to as the Stonewall Plant, located at Route 340 South, Elkton, Virginia, provided that facility is operated in compliance with the requirements contained in a permit issued pursuant to 40 CFR 52.2454. The requirements of Subpart BB 40 CFR shall apply to the facility upon termination of the permit issued pursuant to the 40 CFR 52.2454.

(h) Purged coatings and solvents from surface coating operations subject to the national emission standards for hazardous air pollutants (NESHAP) for the surface coating of automobiles and light-duty trucks at R307-214-2(61), which incorporates 40 CFR part 63 subpart IIII, are not subject to the requirements of Sections R315-264-1050 through 1065.

Note: The requirements of Sections R315-264-1052 through 1065 apply to equipment associated with hazardous waste recycling units previously exempt under Subsection R315-261-6(c)(1). Other exemptions under Section R315-261-4, and Subsection R315-264-1(g) are not affected by these requirements.

R315-264-1051. Definitions.

As used in Sections R315-264-1050 through 1065, all terms shall have the meaning given them in Section R315-264-1031, RCRA, and Rules R315-260 through 266.

R315-264-1052. Standards: Pumps in Light Liquid Service.

(a)(1) Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in Subsection R315-264-1063(b), except as provided in Subsections R315-264-1052(d), (e), and (f).

(2) Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.

(b)(1) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(2) If there are indications of liquids dripping from the pump seal, a leak is detected.

(c)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Section R315-264-1059.

(2) A first attempt at repair, e.g., tightening the packing gland, shall be made no later than 5 calendar days after each leak is detected.

(d) Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of Subsection R315-264-1052(a), provided the following requirements are met:

(1) Each dual mechanical seal system shall be:

(i) Operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure, or

(ii) Equipped with a barrier fluid degassing reservoir that is connected by a closed-vent system to a control device that complies with the requirements of Section R315-264-1060, or

(iii) Equipped with a system that purges the barrier fluid into a hazardous waste stream with no detectable emissions to the atmosphere.

(2) The barrier fluid system shall not be a hazardous waste with organic concentrations 10 percent or greater by weight.

(3) Each barrier fluid system shall be equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.

(4) Each pump shall be checked by visual inspection, each calendar week, for indications of liquids dripping from the pump seals.

(5)(i) Each sensor as described in Subsection R315-264-1052(d)(3) shall be checked daily or be equipped with an audible alarm that shall be checked monthly to ensure that it is functioning properly.

(ii) The owner or operator shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

(6)(i) If there are indications of liquids dripping from the pump seal or the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined in Subsection R315-264-1052(d)(5)(ii), a leak is detected.

(ii) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Section R315-264-1059.

(iii) A first attempt at repair, e.g., relapping the seal, shall be made no later than 5 calendar days after each leak is detected.

(e) Any pump that is designated, as described in Subsection R315-264-1064(g)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of Subsections R315-264-1052(a), (c), and (d) if the pump meets the following requirements:

(1) Shall have no externally actuated shaft penetrating the pump housing.

(2) Shall operate with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background as measured by the methods specified in Subsection R315-264-1063(c).

(3) Shall be tested for compliance with Subsection R315-264-1052(e)(2) initially upon designation, annually, and at other times as requested by the Director.

(f) If any pump is equipped with a closed-vent system capable of capturing and transporting any leakage from the seal or seals to a control device that complies with the requirements of Section R315-264-1060, it is exempt from the requirements of Subsections R315-264-1052(a) through (e).

R315-264-1053. Standards: Compressors.

(a) Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of total organic emissions to the atmosphere, except as provided in Subsections R315-264-1053(h) and (i).

(b) Each compressor seal system as required in Subsection R315-264-1053(a) shall be:

(1) Operated with the barrier fluid at a pressure that is at all times greater than the compressor stuffing box pressure, or

(2) Equipped with a barrier fluid system that is connected by a closed-vent system to a control device that complies with the requirements of Section R315-264-1060, or

(3) Equipped with a system that purges the barrier fluid into a hazardous waste stream with no detectable emissions to

atmosphere.

(c) The barrier fluid shall not be a hazardous waste with organic concentrations 10 percent or greater by weight.

(d) Each barrier fluid system as described in Subsections R315-264-1053(a) through (c) shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.

(e)(1) Each sensor as required in Subsection R315-264-1053(d) shall be checked daily or shall be equipped with an audible alarm that shall be checked monthly to ensure that it is functioning properly unless the compressor is located within the boundary of an unmanned plant site, in which case the sensor shall be checked daily.

(2) The owner or operator shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

(f) If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined under Subsection R315-264-1053(e)(2), a leak is detected.

(g)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Section R315-264-1059.

(2) A first attempt at repair, e.g., tightening the packing gland, shall be made no later than 5 calendar days after each leak is detected.

(h) A compressor is exempt from the requirements of Subsections R315-264-1053(a) and (b) if it is equipped with a closed-vent system capable of capturing and transporting any leakage from the seal to a control device that complies with the requirements of Section R315-264-1060, except as provided in Subsection R315-264-1053(i).

(i) Any compressor that is designated, as described in Subsection R315-264-1064(g)(2), for no detectable emissions as indicated by an instrument reading of less than 500 ppm above background is exempt from the requirements of Subsections R315-264-1053(a) through (h) if the compressor:

(1) Is determined to be operating with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in Subsection R315-264-1063(c).

(2) Is tested for compliance with Subsection R315-264-1053(i)(1) initially upon designation, annually, and at other times as requested by the Director.

R315-264-1054. Standards: Pressure Relief Devices in Gas/Vapor Service.

(a) Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in Subsection R315-264-1063(c).

(b)(1) After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in Section R315-264-1059.

(2) No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in Subsection R315-264-1063(c).

(c) Any pressure relief device that is equipped with a closed-vent system capable of capturing and transporting leakage from the pressure relief device to a control device as described in Section R315-264-264-1060 is exempt from the requirements of Subsection R315-264-1054(a) and (b).

R315-264-1055. Standards: Sampling Connection Systems.

(a) Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system. This system shall collect the sample purge for return to the process or for routing to the appropriate treatment system. Gases displaced during filling of the sample container are not required to be collected or captured.

(b) Each closed-purge, closed-loop, or closed-vent system as required in Subsection R315-264-1055(a) shall meet one of the following requirements:

(1) Return the purged process fluid directly to the process line;

(2) Collect and recycle the purged process fluid; or

(3) Be designed and operated to capture and transport all the purged process fluid to a waste management unit that complies with the applicable requirements of Sections R315-264-1084 through 1086 or a control device that complies with the requirements of Section R315-264-1060.

(c) In-situ sampling systems and sampling systems without purges are exempt from the requirements of Subsections R315-264-1055(a) and (b).

R315-264-1056. Standards: Open-Ended Valves or Lines.

(a)(1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve.

(2) The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring hazardous waste stream flow through the open-ended valve or line.

(b) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the hazardous waste stream end is closed before the second valve is closed.

(c) When a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with Subsection R315-264-1056(a) at all other times.

R315-264-1057. Standards: Valves in Gas/Vapor Service or in Light Liquid Service.

(a) Each valve in gas/vapor or light liquid service shall be monitored monthly to detect leaks by the methods specified in Subsection R315-264-1063(b) and shall comply with Subsections R315-264-1057(b) through (e), except as provided in Subsections R315-264-1057(f), (g), and (h), and Sections R315-264-1061 and 1062.

(b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(c)(1) Any valve for which a leak is not detected for two successive months may be monitored the first month of every succeeding quarter, beginning with the next quarter, until a leak is detected.

(2) If a leak is detected, the valve shall be monitored monthly until a leak is not detected for two successive months.

(d)(1) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in Section R315-264-1059.

(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(e) First attempts at repair include, but are not limited to, the following best practices where practicable:

(1) Tightening of bonnet bolts.

(2) Replacement of bonnet bolts.

(3) Tightening of packing gland nuts.

(4) Injection of lubricant into lubricated packing.

(f) Any valve that is designated, as described in Subsection R315-264-1064(g)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of Subsection

R315-264-1057(a) if the valve:

(1) Has no external actuating mechanism in contact with the hazardous waste stream.

(2) Is operated with emissions less than 500 ppm above background as determined by the method specified in Subsection R315-264-1063(c).

(3) Is tested for compliance with Subsection R315-264-1057(f)(2) initially upon designation, annually, and at other times as requested by the Director.

(g) Any valve that is designated, as described in Subsection R315-264-1064(h)(1), as an unsafe-to-monitor valve is exempt from the requirements of Subsection R315-264-1057(a) if:

(1) The owner or operator of the valve determines that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with Subsection R315-264-1057(a).

(2) The owner or operator of the valve adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times.

(h) Any valve that is designated, as described in Subsection R315-264-1064(h)(2), as a difficult-to-monitor valve is exempt from the requirements of Subsection R315-264-1057(a) if:

(1) The owner or operator of the valve determines that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface.

(2) The hazardous waste management unit within which the valve is located was in operation before June 21, 1990.

(3) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year.

R315-264-1058. Standards: Pumps and Valves in Heavy Liquid Service, Pressure Relief Devices in Light Liquid or Heavy Liquid Service, and Flanges and Other Connectors.

(a) Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and flanges and other connectors shall be monitored within 5 days by the method specified in Subsection R315-264-1063(b) if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method.

(b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(c)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Section R315-264-1059.

(2) The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(d) First attempts at repair include, but are not limited to, the best practices described under Subsection R315-264-1057(e).

(e) Any connector that is inaccessible or is ceramic or ceramic-lined, e.g., porcelain, glass, or glass-lined, is exempt from the monitoring requirements of Subsection R315-264-1058(a) and from the recordkeeping requirements of Section R315-264-1064.

R315-264-1059. Standards: Delay of Repair.

(a) Delay of repair of equipment for which leaks have been detected will be allowed if the repair is technically infeasible without a hazardous waste management unit shutdown. In such a case, repair of this equipment shall occur before the end of the next hazardous waste management unit shutdown.

(b) Delay of repair of equipment for which leaks have been detected will be allowed for equipment that is isolated from the hazardous waste management unit and that does not continue to contain or contact hazardous waste with organic concentrations at least 10 percent by weight.

(c) Delay of repair for valves will be allowed if:

(1) The owner or operator determines that emissions of purged material resulting from immediate repair are greater than the emissions likely to result from delay of repair.

(2) When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with Section R315-264-1060.

(d) Delay of repair for pumps will be allowed if:

(1) Repair requires the use of a dual mechanical seal system that includes a barrier fluid system.

(2) Repair is completed as soon as practicable, but not later than 6 months after the leak was detected.

(e) Delay of repair beyond a hazardous waste management unit shutdown will be allowed for a valve if valve assembly replacement is necessary during the hazardous waste management unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next hazardous waste management unit shutdown will not be allowed unless the next hazardous waste management unit shutdown occurs sooner than 6 months after the first hazardous waste management unit shutdown.

R315-264-1060. Standards: Closed-Vent Systems and Control Devices.

(a) Owners and operators of closed-vent systems and control devices subject to Sections R315-264-1050 through 1065 shall comply with the provisions of Section R315-264-1033.

(b)(1) The owner or operator of an existing facility who cannot install a closed-vent system and control device to comply with the provisions of Sections R315-264-1050 through 1065 on the effective date that the facility becomes subject to the provisions of Sections R315-264-1050 through 1065 shall prepare an implementation schedule that includes dates by which the closed-vent system and control device will be installed and in operation. The controls shall be installed as soon as possible, but the implementation schedule may allow up to 30 months after the effective date that the facility becomes subject to Sections R315-264-1050 through 1065 for installation and startup.

(2) Any unit that begins operation after December 21, 1990, and is subject to the provisions of Sections R315-264-1050 through 1065 when operation begins, shall comply with the rules immediately, i.e., shall have control devices installed and operating on startup of the affected unit; the 30-month implementation schedule does not apply.

(3) The owner or operator of any facility in existence on the effective date of a statutory or regulatory amendment that renders the facility subject to Sections R315-264-1050 through 1065 shall comply with all requirements of Sections R315-264-1050 through 1065 as soon as practicable but no later than 30 months after the amendment's effective date. When control equipment required by Sections R315-264-1050 through 1065 cannot be installed and begin operation by the effective date of the amendment, the facility owner or operator shall prepare an implementation schedule that includes the following information: Specific calendar dates for award or contracts or issuance of purchase orders for the control equipment, initiation of on-site installation of the control equipment, completion of the control equipment installation, and performance of any testing to demonstrate that the installed equipment meets the applicable standards of Sections R315-264-1050 through 1065. The owner or operator shall enter the implementation schedule in the operating record or in a permanent, readily available file located at the facility.

(4) Owners and operators of facilities and units that become newly subject to the requirements of Sections R315-264-1050 through 1065 after December 8, 1997, due to an

action other than those described in Subsection R315-264-1060(b)(3) shall comply with all applicable requirements immediately, i.e., shall have control devices installed and operating on the date the facility or unit becomes subject to Sections R315-264-1050 through 1065; the 30-month implementation schedule does not apply.

R315-264-1061. Alternative Standards for Valves in Gas/Vapor Service or in Light Liquid Service: Percentage of Valves Allowed to Leak.

(a) An owner or operator subject to the requirements of Section R315-264-1057 may elect to have all valves within a hazardous waste management unit comply with an alternative standard that allows no greater than 2 percent of the valves to leak.

(b) The following requirements shall be met if an owner or operator decides to comply with the alternative standard of allowing 2 percent of valves to leak:

(1) A performance test as specified in Section R315-264-1061(c) shall be conducted initially upon designation, annually, and at other times requested by the Director.

(2) If a valve leak is detected, it shall be repaired in accordance with Subsections R315-264-1057(d) and (e).

(c) Performance tests shall be conducted in the following manner:

(1) All valves subject to the requirements in Section R315-264-1057 within the hazardous waste management unit shall be monitored within 1 week by the methods specified in Subsection R315-264-1063(b).

(2) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(3) The leak percentage shall be determined by dividing the number of valves subject to the requirements in Section R315-264-1057 for which leaks are detected by the total number of valves subject to the requirements in Section R315-264-1057 within the hazardous waste management unit.

R315-264-1062. Alternative Standards for Valves in Gas/Vapor Service or in Light Liquid Service: Skip Period Leak Detection and Repair.

(a) An owner or operator subject to the requirements of Section R315-264-1057 may elect for all valves within a hazardous waste management unit to comply with one of the alternative work practices specified in Subsections R315-264-1062(b)(2) and (3).

(b)(1) An owner or operator shall comply with the requirements for valves, as described in Section R315-264-1057, except as described in Subsections R315-264-1062(b)(2) and (b)(3).

(2) After two consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than 2 percent, an owner or operator may begin to skip one of the quarterly leak detection periods, i.e., monitor for leaks once every six months, for the valves subject to the requirements in Section R315-264-1057.

(3) After five consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than 2 percent, an owner or operator may begin to skip three of the quarterly leak detection periods, i.e., monitor for leaks once every year, for the valves subject to the requirements in Section R315-264-1057.

(4) If the percentage of valves leaking is greater than 2 percent, the owner or operator shall monitor monthly in compliance with the requirements in Section R315-264-1057, but may again elect to use Section R315-264-1062 after meeting the requirements of Section R315-264-1057(c)(1).

R315-264-1063. Test Methods and Procedures.

(a) Each owner or operator subject to the provisions of

Rule R315-264 shall comply with the test methods and procedures requirements provided in Section R315-264-1063.

(b) Leak detection monitoring, as required in Sections R315-264-1052 through 1062, shall comply with the following requirements:

(1) Monitoring shall comply with Reference Method 21 in 40 CFR part 60.

(2) The detection instrument shall meet the performance criteria of Reference Method 21.

(3) The instrument shall be calibrated before use on each day of its use by the procedures specified in Reference Method 21.

(4) Calibration gases shall be:

(i) Zero air, less than 10 ppm of hydrocarbon in air.

(ii) A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.

(5) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21.

(c) When equipment is tested for compliance with no detectable emissions, as required in Subsections R315-264-1052(e), 1053(i), 1054, and 1057(f), the test shall comply with the following requirements:

(1) The requirements of Subsections R315-264-1063(b)(1) through (4) shall apply.

(2) The background level shall be determined as set forth in Reference Method 21.

(3) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21.

(4) The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

(d) In accordance with the waste analysis plan required by Subsection R315-264-13(b), an owner or operator of a facility shall determine, for each piece of equipment, whether the equipment contains or contacts a hazardous waste with organic concentration that equals or exceeds 10 percent by weight using the following:

(1) Methods described in ASTM Methods D 2267-88, E 169-87, E 168-88, E 260-85, incorporated by reference under Section R315-260-11);

(2) Method 9060A, incorporated by reference under Section R315-260-11, of "Test Methods for Evaluating Solid Waste," EPA Publication SW-846, for computing total organic concentration of the sample, or analyzed for its individual organic constituents; or

(3) Application of the knowledge of the nature of the hazardous waste stream or the process by which it was produced. Documentation of a waste determination by knowledge is required. Examples of documentation that shall be used to support a determination under this provision include production process information documenting that no organic compounds are used, information that the waste is generated by a process that is identical to a process at the same or another facility that has previously been demonstrated by direct measurement to have a total organic content less than 10 percent, or prior speciation analysis results on the same waste stream where it can also be documented that no process changes have occurred since that analysis that could affect the waste total organic concentration.

(e) If an owner or operator determines that a piece of equipment contains or contacts a hazardous waste with organic concentrations at least 10 percent by weight, the determination can be revised only after following the procedures in Subsections R315-264-1063(d)(1) or (d)(2).

(f) When an owner or operator and the Director do not agree on whether a piece of equipment contains or contacts a

hazardous waste with organic concentrations at least 10 percent by weight, the procedures in Subsections R315-264-1063(d)(1) or (d)(2) can be used to resolve the dispute.

(g) Samples used in determining the percent organic content shall be representative of the highest total organic content hazardous waste that is expected to be contained in or contact the equipment.

(h) To determine if pumps or valves are in light liquid service, the vapor pressures of constituents may be obtained from standard reference texts or may be determined by ASTM D-2879-86, incorporated by reference under Section R315-260-11.

(i) Performance tests to determine if a control device achieves 95 weight percent organic emission reduction shall comply with the procedures of Sections R315-264-1034(c)(1) through (c)(4).

R315-264-1064. Recordkeeping Requirements.

(a)(1) Each owner or operator subject to the provisions of Sections R315-264-1050 through 1065 shall comply with the recordkeeping requirements of Section R315-264-1064.

(2) An owner or operator of more than one hazardous waste management unit subject to the provisions of Sections R315-264-1050 through 1065 may comply with the recordkeeping requirements for these hazardous waste management units in one recordkeeping system if the system identifies each record by each hazardous waste management unit.

(b) Owners and operators shall record the following information in the facility operating record:

(1) For each piece of equipment to which Sections R315-264-1050 through 1065 apply:

(i) Equipment identification number and hazardous waste management unit identification.

(ii) Approximate locations within the facility, e.g., identify the hazardous waste management unit on a facility plot plan.

(iii) Type of equipment, e.g., a pump or pipeline valve.

(iv) Percent-by-weight total organics in the hazardous waste stream at the equipment.

(v) Hazardous waste state at the equipment, e.g., gas/vapor or liquid.

(vi) Method of compliance with the standard, e.g., "monthly leak detection and repair" or "equipped with dual mechanical seals."

(2) For facilities that comply with the provisions of Subsection R315-264-1033(a)(2), an implementation schedule as specified in Subsection R315-264-1033(a)(2).

(3) Where an owner or operator chooses to use test data to demonstrate the organic removal efficiency or total organic compound concentration achieved by the control device, a performance test plan as specified in Subsection R315-264-1035(b)(3).

(4) Documentation of compliance with Section R315-264-1060, including the detailed design documentation or performance test results specified in Subsection R315-264-1035(b)(4).

(c) When each leak is detected as specified in Sections R315-264-1052, 1053, 1057, and 1058, the following requirements apply:

(1) A weatherproof and readily visible identification, marked with the equipment identification number, the date evidence of a potential leak was found in accordance with Subsection R315-264-1058(a), and the date the leak was detected, shall be attached to the leaking equipment.

(2) The identification on equipment, except on a valve, may be removed after it has been repaired.

(3) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in Subsection R315-264-1057(c) and no leak has been detected

during those 2 months.

(d) When each leak is detected as specified in Subsections R315-264-1052, 1053, 1057, and 1058, the following information shall be recorded in an inspection log and shall be kept in the facility operating record:

(1) The instrument and operator identification numbers and the equipment identification number.

(2) The date evidence of a potential leak was found in accordance with Subsection R315-264-1058(a).

(3) The date the leak was detected and the dates of each attempt to repair the leak.

(4) Repair methods applied in each attempt to repair the leak.

(5) "Above 10,000" if the maximum instrument reading measured by the methods specified in Subsection R315-264-1063(b) after each repair attempt is equal to or greater than 10,000 ppm.

(6) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.

(7) Documentation supporting the delay of repair of a valve in compliance with Subsection R315-264-1059(c).

(8) The signature of the owner or operator, or designate, whose decision it was that repair could not be effected without a hazardous waste management unit shutdown.

(9) The expected date of successful repair of the leak if a leak is not repaired within 15 calendar days.

(10) The date of successful repair of the leak.

(e) Design documentation and monitoring, operating, and inspection information for each closed-vent system and control device required to comply with the provisions of Section R315-264-1060 shall be recorded and kept up-to-date in the facility operating record as specified in Subsection R315-264-1035(c). Design documentation is specified in Subsection R315-264-1035(c)(1) and (c)(2) and monitoring, operating, and inspection information in Subsection R315-264-1035(c)(3) through (c)(8).

(f) For a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system, the Director shall specify the appropriate recordkeeping requirements.

(g) The following information pertaining to all equipment subject to the requirements in Sections R315-264-1052 through 1060 shall be recorded in a log that is kept in the facility operating record:

(1) A list of identification numbers for equipment, except welded fittings, subject to the requirements of Sections R315-264-1050 through 1065.

(2)(i) A list of identification numbers for equipment that the owner or operator elects to designate for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, under the provisions of Subsections R315-264-1052(e), 1053(i), and 1057(f).

(ii) The designation of this equipment as subject to the requirements of Subsections R315-264-1052(e), 1053(i), or 1057(f) shall be signed by the owner or operator.

(3) A list of equipment identification numbers for pressure relief devices required to comply with Subsection R315-264-1054(a).

(4)(i) The dates of each compliance test required in Subsections R315-264-1052(e), 1053(i), 1054, and 1057(f).

(ii) The background level measured during each compliance test.

(iii) The maximum instrument reading measured at the equipment during each compliance test.

(5) A list of identification numbers for equipment in vacuum service.

(6) Identification, either by list or location, area or group, of equipment that contains or contacts hazardous waste with an organic concentration of at least 10 percent by weight for less

than 300 hours per calendar year.

(h) The following information pertaining to all valves subject to the requirements of Subsections R315-264-1057 (g) and (h) shall be recorded in a log that is kept in the facility operating record:

(1) A list of identification numbers for valves that are designated as unsafe to monitor, an explanation for each valve stating why the valve is unsafe to monitor, and the plan for monitoring each valve.

(2) A list of identification numbers for valves that are designated as difficult to monitor, an explanation for each valve stating why the valve is difficult to monitor, and the planned schedule for monitoring each valve.

(i) The following information shall be recorded in the facility operating record for valves complying with Section R315-264-1062:

(1) A schedule of monitoring.

(2) The percent of valves found leaking during each monitoring period.

(j) The following information shall be recorded in a log that is kept in the facility operating record:

(1) Criteria required in Subsections R315-264-1052(d)(5)(ii) and 1053(e)(2) and an explanation of the design criteria.

(2) Any changes to these criteria and the reasons for the changes.

(k) The following information shall be recorded in a log that is kept in the facility operating record for use in determining exemptions as provided in the applicability section of Sections R315-264-1050 through 1065 and other specific sections of Rule R315-264:

(1) An analysis determining the design capacity of the hazardous waste management unit.

(2) A statement listing the hazardous waste influent to and effluent from each hazardous waste management unit subject to the requirements in Subsections R315-264-1052 through 1060 and an analysis determining whether these hazardous wastes are heavy liquids.

(3) An up-to-date analysis and the supporting information and data used to determine whether or not equipment is subject to the requirements in Subsections R315-264-1052 through 1060. The record shall include supporting documentation as required by Subsection R315-264-1063(d)(3) when application of the knowledge of the nature of the hazardous waste stream or the process by which it was produced is used. If the owner or operator takes any action, e.g., changing the process that produced the waste, that could result in an increase in the total organic content of the waste contained in or contacted by equipment determined not to be subject to the requirements in Sections R315-264-1052 through 1060, then a new determination is required.

(l) Records of the equipment leak information required by Subsection R315-264-1064(d) and the operating information required by Subsection R315-264-1064(e) need be kept only 3 years.

(m) The owner or operator of a facility with equipment that is subject to Sections R315-264-1050 through 1065 and to regulations at 40 CFR part 60, part 61, or part 63 may elect to determine compliance with Sections R315-264-1050 through 1065 either by documentation pursuant to Section R315-264-1064, or by documentation of compliance with the regulations at 40 CFR part 60, part 61, or part 63 pursuant to the relevant provisions of the regulations at 40 CFR part 60, part 61, or part 63. The documentation of compliance under regulations at 40 CFR part 60, part 61, or part 63 shall be kept with or made readily available with the facility operating record.

R315-264-1065. Reporting Requirements.

(a) A semiannual report shall be submitted by owners and

operators subject to the requirements of Sections R315-264-1050 through 1065 to the Director by dates specified by the Director. The report shall include the following information:

(1) The Environmental Protection Agency identification number, name, and address of the facility.

(2) For each month during the semiannual reporting period:

(i) The equipment identification number of each valve for which a leak was not repaired as required in Subsection R315-264-1057(d).

(ii) The equipment identification number of each pump for which a leak was not repaired as required in Subsections R315-264-1052(c) and (d)(6).

(iii) The equipment identification number of each compressor for which a leak was not repaired as required in Subsection R315-264-1053(g).

(3) Dates of hazardous waste management unit shutdowns that occurred within the semiannual reporting period.

(4) For each month during the semiannual reporting period, dates when the control device installed as required by Sections R315-264-1052, 1053, 1054, or 1055 exceeded or operated outside of the design specifications as defined in Subsection R315-264-1064(e) and as indicated by the control device monitoring required by Section R315-264-1060 and was not corrected within 24 hours, the duration and cause of each exceedance, and any corrective measures taken.

(b) If, during the semiannual reporting period, leaks from valves, pumps, and compressors are repaired as required in Subsections R315-264-1057(d), 1052(c) and (d)(6), and 1053(g), respectively, and the control device does not exceed or operate outside of the design specifications as defined in Subsection R315-264-1064(e) for more than 24 hours, a report to the Director is not required.

R315-264-1080. Air Emission Standards for Tanks, Surface Impoundments, and Containers -- Applicability.

(a) The requirements of Sections R315-264-1080 through 1090 apply to owners and operators of all facilities that treat, store, or dispose of hazardous waste in tanks, surface impoundments, or containers subject to either Sections R315-264-170 through 179, 190 through 200, or 220 through 232 except as Section R315-264-1 and Subsection R315-264-1080(b) provide otherwise.

(b) The requirements of Sections R315-264-1080 through 1090 do not apply to the following waste management units at the facility:

(1) A waste management unit that holds hazardous waste placed in the unit before December 6, 1996, and in which no hazardous waste is added to the unit on or after December 6, 1996.

(2) A container that has a design capacity less than or equal to 0.1 cubic meter.

(3) A tank in which an owner or operator has stopped adding hazardous waste and the owner or operator has begun implementing or completed closure pursuant to an approved closure plan.

(4) A surface impoundment in which an owner or operator has stopped adding hazardous waste, except to implement an approved closure plan, and the owner or operator has begun implementing or completed closure pursuant to an approved closure plan.

(5) A waste management unit that is used solely for on-site treatment or storage of hazardous waste that is placed in the unit as a result of implementing remedial activities required under the corrective action authorities of RCRA sections 3004(u), 3004(v), or 3008(h); CERCLA authorities; or similar Federal or Utah authorities.

(6) A waste management unit that is used solely for the management of radioactive mixed waste in accordance with all

applicable regulations under the authority of the Atomic Energy Act and the Nuclear Waste Policy Act.

(7) A hazardous waste management unit that the owner or operator certifies is equipped with and operating air emission controls in accordance with the requirements of an applicable regulation codified under the Utah Air Conservation Act. For the purpose of complying with Subsection R315-264-1080(b), a tank for which the air emission control includes an enclosure, as opposed to a cover, shall be in compliance with the enclosure and control device requirements of Subsection R315-264-1084(i), except as provided in Subsection R315-264-1082(c)(5).

(8) A tank that has a process vent as defined in Section R315-264-1031.

(c) For the owner and operator of a facility subject to Sections R315-264-1080 through 1090 who received a final permit under RCRA section 3005 prior to December 6, 1996, the requirements of Sections R315-264-1080 through 1090 shall be incorporated into the permit when the permit is reissued in accordance with the requirements of Section R315-124-15 or reviewed in accordance with the requirements of Subsection R315-270-50(d). Until such date when the permit is reissued in accordance with the requirements of Section R315-124-15 or reviewed in accordance with the requirements of Subsection R315-270-50(d), the owner and operator are subject to the requirements of 40 CFR 265.1080 through 1090, which are adopted by reference.

(d) The requirements of Sections R315-264-1080 through 1090, except for the recordkeeping requirements specified in Subsection R315-264-1089(i), are administratively stayed for a tank or a container used for the management of hazardous waste generated by organic peroxide manufacturing and its associated laboratory operations when the owner or operator of the unit meets all of the following conditions:

(1) The owner or operator identifies that the tank or container receives hazardous waste generated by an organic peroxide manufacturing process producing more than one functional family of organic peroxides or multiple organic peroxides within one functional family, that one or more of these organic peroxides could potentially undergo self-accelerating thermal decomposition at or below ambient temperatures, and that organic peroxides are the predominant products manufactured by the process. For the purpose of meeting the conditions of Section R315-264-1080, "organic peroxide" means an organic compound that contains the bivalent structure and which may be considered to be a structural derivative of hydrogen peroxide where one or both of the hydrogen atoms has been replaced by an organic radical.

(2) The owner or operator prepares documentation, in accordance with the requirements of Subsection R315-264-1089(i), explaining why an undue safety hazard would be created if air emission controls specified in Sections R315-264-1084 through 1087 are installed and operated on the tanks and containers used at the facility to manage the hazardous waste generated by the organic peroxide manufacturing process or processes meeting the conditions of Subsection R315-264-1080(d)(1).

(3) The owner or operator notifies the Director in writing that hazardous waste generated by an organic peroxide manufacturing process or processes meeting the conditions of Subsection R315-264-1080(d)(1) are managed at the facility in tanks or containers meeting the conditions of Subsection R315-264-1080(d)(2). The notification shall state the name and address of the facility, and be signed and dated by an authorized representative of the facility owner or operator.

R315-264-1081. Definitions.

As used in Sections R315-264-1080 through 1090, all terms shall have the meaning given to them in 40 CFR 265.1081, which is adopted by reference; RCRA; and Rules

R315-260 through 266.

R315-264-1082. Standards: General.

(a) Section R315-264-1082 applies to the management of hazardous waste in tanks, surface impoundments, and containers subject to Sections R315-264-1080 through 1090.

(b) The owner or operator shall control air pollutant emissions from each hazardous waste management unit in accordance with standards specified in Sections R315-264-1084 through 1087, as applicable to the hazardous waste management unit, except as provided for in Subsection R315-264-1082(c).

(c) A tank, surface impoundment, or container is exempt from standards specified in Sections R315-264-1084 through 1087, as applicable, provided that the waste management unit is one of the following:

(1) A tank, surface impoundment, or container for which all hazardous waste entering the unit has an average VO concentration at the point of waste origination of less than 500 parts per million by weight (ppmw). The average VO concentration shall be determined using the procedures specified in Subsection R315-264-1083(a). The owner or operator shall review and update, as necessary, this determination at least once every 12 months following the date of the initial determination for the hazardous waste streams entering the unit.

(2) A tank, surface impoundment, or container for which the organic content of all the hazardous waste entering the waste management unit has been reduced by an organic destruction or removal process that achieves any one of the following conditions:

(i) A process that removes or destroys the organics contained in the hazardous waste to a level such that the average VO concentration of the hazardous waste at the point of waste treatment is less than the exit concentration limit (Ct) established for the process. The average VO concentration of the hazardous waste at the point of waste treatment and the exit concentration limit for the process shall be determined using the procedures specified in Subsection R315-264-1083(b).

(ii) A process that removes or destroys the organics contained in the hazardous waste to a level such that the organic reduction efficiency (R) for the process is equal to or greater than 95 percent, and the average VO concentration of the hazardous waste at the point of waste treatment is less than 100 ppmw. The organic reduction efficiency for the process and the average VO concentration of the hazardous waste at the point of waste treatment shall be determined using the procedures specified in Subsection R315-264-1083(b).

(iii) A process that removes or destroys the organics contained in the hazardous waste to a level such that the actual organic mass removal rate (MR) for the process is equal to or greater than the required organic mass removal rate (RMR) established for the process. The required organic mass removal rate and the actual organic mass removal rate for the process shall be determined using the procedures specified in Subsection R315-264-1083(b).

(iv) A biological process that destroys or degrades the organics contained in the hazardous waste, such that either of the following conditions is met:

(A) The organic reduction efficiency (R) for the process is equal to or greater than 95 percent, and the organic biodegradation efficiency (R_{bio}) for the process is equal to or greater than 95 percent. The organic reduction efficiency and the organic biodegradation efficiency for the process shall be determined using the procedures specified in Subsection R315-264-1083(b).

(B) The total actual organic mass biodegradation rate (MR_{bio}) for all hazardous waste treated by the process is equal to or greater than the required organic mass removal rate (RMR). The required organic mass removal rate and the actual

organic mass biodegradation rate for the process shall be determined using the procedures specified in Subsection R315-264-1083(b).

(v) A process that removes or destroys the organics contained in the hazardous waste and meets all of the following conditions:

(A) From the point of waste origination through the point where the hazardous waste enters the treatment process, the hazardous waste is managed continuously in waste management units which use air emission controls in accordance with the standards specified in Sections R315-264-1084 through 1087, as applicable to the waste management unit.

(B) From the point of waste origination through the point where the hazardous waste enters the treatment process, any transfer of the hazardous waste is accomplished through continuous hard-piping or other closed system transfer that does not allow exposure of the waste to the atmosphere. The Director considers a drain system that meets the requirements of Subsection R307-214-2(29), which incorporates 40 CFR part 63, subpart RR-National Emission Standards for Individual Drain Systems to be a closed system.

(C) The average VO concentration of the hazardous waste at the point of waste treatment is less than the lowest average VO concentration at the point of waste origination determined for each of the individual waste streams entering the process or 500 ppmw, whichever value is lower. The average VO concentration of each individual waste stream at the point of waste origination shall be determined using the procedures specified in Subsection R315-264-1083(a). The average VO concentration of the hazardous waste at the point of waste treatment shall be determined using the procedures specified in Subsection R315-264-1083(b).

(vi) A process that removes or destroys the organics contained in the hazardous waste to a level such that the organic reduction efficiency (R) for the process is equal to or greater than 95 percent and the owner or operator certifies that the average VO concentration at the point of waste origination for each of the individual waste streams entering the process is less than 10,000 ppmw. The organic reduction efficiency for the process and the average VO concentration of the hazardous waste at the point of waste origination shall be determined using the procedures specified in Subsections R315-264-1083(b) and 1083(a), respectively.

(vii) A hazardous waste incinerator for which the owner or operator has either:

(A) Been issued a final permit under Rule R315-270 which implements the requirements of Sections R315-264-340 through 351; or

(B) Has designed and operates the incinerator in accordance with the interim status requirements of 40 CFR 265.340 through 352, which are adopted by reference.

(viii) A boiler or industrial furnace for which the owner or operator has either:

(A) Been issued a final permit under Rule R315-270 which implements the requirements of Sections R315-266-100 through 112, or

(B) Has designed and operates the boiler or industrial furnace in accordance with the interim status requirements of Sections R315-266-100 through 112.

(ix) For the purpose of determining the performance of an organic destruction or removal process in accordance with the conditions in each of Subsections R315-264-1082(c)(2)(i) through (c)(2)(vi), the owner or operator shall account for VO concentrations determined to be below the limit of detection of the analytical method by using the following VO concentration:

(A) If Method 25D in 40 CFR part 60, appendix A is used for the analysis, one-half the blank value determined in the method at section 4.4 of Method 25D in 40 CFR part 60, appendix A, or a value of 25 ppmw, whichever is less.

(B) If any other analytical method is used, one-half the sum of the limits of detection established for each organic constituent in the waste that has a Henry's law constant value at least 0.1 mole-fraction-in-the-gas-phase/mole-fraction-in-the-liquid-phase (0.1 Y/X), which can also be expressed as 1.8×10^{-6} atmospheres/gram-mole/m³, at 25 degrees Celsius.

(3) A tank or surface impoundment used for biological treatment of hazardous waste in accordance with the requirements of Subsection R315-264-1082(c)(2)(iv).

(4) A tank, surface impoundment, or container for which all hazardous waste placed in the unit either:

(i) Meets the numerical concentration limits for organic hazardous constituents, applicable to the hazardous waste, as specified in Section R315-268-40-Land Disposal Restrictions under Table "Treatment Standards for Hazardous Waste;" or

(ii) The organic hazardous constituents in the waste have been treated by the treatment technology established by the Board for the waste in Subsection R315-268-42(a), or have been removed or destroyed by an equivalent method of treatment approved by EPA pursuant to 40 CFR 268.42(b).

(5) A tank used for bulk feed of hazardous waste to a waste incinerator and all of the following conditions are met:

(i) The tank is located inside an enclosure vented to a control device that is designed and operated in accordance with all applicable requirements specified under Section R315-214-1, which incorporates 40 CFR part 61, subpart FF-National Emission Standards for Benzene Waste Operations for a facility at which the total annual benzene quantity from the facility is equal to or greater than 10 megagrams per year;

(ii) The enclosure and control device serving the tank were installed and began operation prior to November 25, 1996 and

(iii) The enclosure is designed and operated in accordance with the criteria for a permanent total enclosure as specified in "Procedure T-Criteria for and Verification of a Permanent or Temporary Total Enclosure" under 40 CFR 52.741, appendix B. The enclosure may have permanent or temporary openings to allow worker access; passage of material into or out of the enclosure by conveyor, vehicles, or other mechanical or electrical equipment; or to direct air flow into the enclosure. The owner or operator shall perform the verification procedure for the enclosure as specified in Section 5.0 to "Procedure T-Criteria for and Verification of a Permanent or Temporary Total Enclosure" annually.

(d) The Director may at any time perform or request that the owner or operator perform a waste determination for a hazardous waste managed in a tank, surface impoundment, or container exempted from using air emission controls under the provisions of Section R315-264-1082 as follows:

(1) The waste determination for average VO concentration of a hazardous waste at the point of waste origination shall be performed using direct measurement in accordance with the applicable requirements of Subsection R315-264-1083(a). The waste determination for a hazardous waste at the point of waste treatment shall be performed in accordance with the applicable requirements of Subsection R315-264-1083(b).

(2) In performing a waste determination pursuant to Subsection R315-264-1082(d)(1), the sample preparation and analysis shall be conducted as follows:

(i) In accordance with the method used by the owner or operator to perform the waste analysis, except in the case specified in Subsection R315-264-1082(d)(2)(ii).

(ii) If the Director determines that the method used by the owner or operator was not appropriate for the hazardous waste managed in the tank, surface impoundment, or container, then the Director may choose an appropriate method.

(3) In a case when the owner or operator is requested to perform the waste determination, the Director may elect to have an authorized representative observe the collection of the hazardous waste samples used for the analysis.

(4) In a case when the results of the waste determination performed or requested by the Director do not agree with the results of a waste determination performed by the owner or operator using knowledge of the waste, then the results of the waste determination performed in accordance with the requirements of Subsection R315-264-1082(d)(1) shall be used to establish compliance with the requirements of Sections R315-264-1080 through 1090.

(5) In a case when the owner or operator has used an averaging period greater than 1 hour for determining the average VO concentration of a hazardous waste at the point of waste origination, the Director may elect to establish compliance with Sections R315-264-1080 through 1090 by performing or requesting that the owner or operator perform a waste determination using direct measurement based on waste samples collected within a 1-hour period as follows:

(i) The average VO concentration of the hazardous waste at the point of waste origination shall be determined by direct measurement in accordance with the requirements of Subsection R315-264-1083(a).

(ii) Results of the waste determination performed or requested by the Director showing that the average VO concentration of the hazardous waste at the point of waste origination is equal to or greater than 500 ppmw shall constitute noncompliance with Sections R315-264-1080 through 1090 except in a case as provided for in Subsection R315-264-1082(d)(5)(iii).

(iii) For the case when the average VO concentration of the hazardous waste at the point of waste origination previously has been determined by the owner or operator using an averaging period greater than 1 hour to be less than 500 ppmw but because of normal operating process variations the VO concentration of the hazardous waste determined by direct measurement for any given 1-hour period may be equal to or greater than 500 ppmw, information that was used by the owner or operator to determine the average VO concentration of the hazardous waste, e.g., test results, measurements, calculations, and other documentation, and recorded in the facility records in accordance with the requirements of Subsections R315-264-1083(a) and Section R315-264-1089 shall be considered by the Director together with the results of the waste determination performed or requested by the Director in establishing compliance with Sections R315-264-1080 through 1090.

R315-264-1083. Waste Determination Procedures.

(a) Waste determination procedure to determine average volatile organic (VO) concentration of a hazardous waste at the point of waste origination.

(1) An owner or operator shall determine the average VO concentration at the point of waste origination for each hazardous waste placed in a waste management unit exempted under the provisions of Subsection R315-264-1082(c)(1) from using air emission controls in accordance with standards specified in Sections R315-264-1084 through 1087, as applicable to the waste management unit.

(i) An initial determination of the average VO concentration of the waste stream shall be made before the first time any portion of the material in the hazardous waste stream is placed in a waste management unit exempted under the provisions of Subsection R315-264-1082(c)(1) from using air emission controls, and thereafter an initial determination of the average VO concentration of the waste stream shall be made for each averaging period that a hazardous waste is managed in the unit; and

(ii) Perform a new waste determination whenever changes to the source generating the waste stream are reasonably likely to cause the average VO concentration of the hazardous waste to increase to a level that is equal to or greater than the applicable VO concentration limits specified in Section R315-

264-1082.

(2) For a waste determination that is required by Subsection R315-264-1083(a)(1), the average VO concentration of a hazardous waste at the point of waste origination shall be determined in accordance with the procedures specified in 40 CFR 265.1084(a)(2) through (a)(4), which are adopted by reference.

(b) Waste determination procedures for treated hazardous waste.

(1) An owner or operator shall perform the applicable waste determinations for each treated hazardous waste placed in waste management units exempted under the provisions of Subsections R315-264-1082(c)(2)(i) through (c)(2)(vi) from using air emission controls in accordance with standards specified in Sections R315-264-1084 through 1087, as applicable to the waste management unit.

(i) An initial determination of the average VO concentration of the waste stream shall be made before the first time any portion of the material in the treated waste stream is placed in the exempt waste management unit, and thereafter update the information used for the waste determination at least once every 12 months following the date of the initial waste determination; and

(ii) Perform a new waste determination whenever changes to the process generating or treating the waste stream are reasonably likely to cause the average VO concentration of the hazardous waste to increase to a level such that the applicable treatment conditions specified in Subsection R315-264-1082(c)(2) are not achieved.

(2) The waste determination for a treated hazardous waste shall be performed in accordance with the procedures specified in 40 CFR 265.1084(b)(2) through (b)(9), which are adopted by reference, as applicable to the treated hazardous waste.

(c) Procedure to determine the maximum organic vapor pressure of a hazardous waste in a tank.

(1) An owner or operator shall determine the maximum organic vapor pressure for each hazardous waste placed in a tank using Tank Level 1 controls in accordance with standards specified in Subsection R315-264-1084(c).

(2) The maximum organic vapor pressure of the hazardous waste may be determined in accordance with the procedures specified in 40 CFR 265.1084(c)(2) through (c)(4), which are adopted by reference.

(d) The procedure for determining no detectable organic emissions for the purpose of complying with Sections R315-264-1080 through 1090 shall be conducted in accordance with the procedures specified in 40 CFR 265.1084(d), which is adopted by reference.

R315-264-1084. Standards: Tanks.

(a) The provisions of Section R315-264-1084 apply to the control of air pollutant emissions from tanks for which Subsection R315-264-1082(b) references the use of Section R315-264-1084 for such air emission control.

(b) The owner or operator shall control air pollutant emissions from each tank subject to Section R315-264-1084 in accordance with the following requirements as applicable:

(1) For a tank that manages hazardous waste that meets all of the conditions specified in Subsections R315-264-1084(b)(1)(i) through (b)(1)(iii), the owner or operator shall control air pollutant emissions from the tank in accordance with the Tank Level 1 controls specified in Subsection R315-264-1084(c) or the Tank Level 2 controls specified in Subsection R315-264-1084(d).

(i) The hazardous waste in the tank has a maximum organic vapor pressure which is less than the maximum organic vapor pressure limit for the tank's design capacity category as follows:

(A) For a tank design capacity equal to or greater than 151

cubic meters, the maximum organic vapor pressure limit for the tank is 5.2 kPa.

(B) For a tank design capacity equal to or greater than 75 cubic meters but less than 151 cubic meters, the maximum organic vapor pressure limit for the tank is 27.6 kPa.

(C) For a tank design capacity less than 75 cubic meters, the maximum organic vapor pressure limit for the tank is 76.6 kPa.

(ii) The hazardous waste in the tank is not heated by the owner or operator to a temperature that is greater than the temperature at which the maximum organic vapor pressure of the hazardous waste is determined for the purpose of complying with Subsection R315-264-1084(b)(1)(i).

(iii) The hazardous waste in the tank is not treated by the owner or operator using a waste stabilization process, as defined in 40 CFR 265.1081, which is adopted by reference.

(2) For a tank that manages hazardous waste that does not meet all of the conditions specified in Subsections R315-264-1084(b)(1)(i) through (b)(1)(iii), the owner or operator shall control air pollutant emissions from the tank by using Tank Level 2 controls in accordance with the requirements of Subsection R315-264-1084(d). Examples of tanks required to use Tank Level 2 controls include: A tank used for a waste stabilization process; and a tank for which the hazardous waste in the tank has a maximum organic vapor pressure that is equal to or greater than the maximum organic vapor pressure limit for the tank's design capacity category as specified in Subsection R315-264-1084(b)(1)(i).

(c) Owners and operators controlling air pollutant emissions from a tank using Tank Level 1 controls shall meet the requirements specified in Subsections R315-264-1084(c)(1) through (c)(4):

(1) The owner or operator shall determine the maximum organic vapor pressure for a hazardous waste to be managed in the tank using Tank Level 1 controls before the first time the hazardous waste is placed in the tank. The maximum organic vapor pressure shall be determined using the procedures specified in Subsection R315-264-1083(c). Thereafter, the owner or operator shall perform a new determination whenever changes to the hazardous waste managed in the tank could potentially cause the maximum organic vapor pressure to increase to a level that is equal to or greater than the maximum organic vapor pressure limit for the tank design capacity category specified in Subsection R315-264-1084(b)(1)(i), as applicable to the tank.

(2) The tank shall be equipped with a fixed roof designed to meet the following specifications:

(i) The fixed roof and its closure devices shall be designed to form a continuous barrier over the entire surface area of the hazardous waste in the tank. The fixed roof may be a separate cover installed on the tank, e.g., a removable cover mounted on an open-top tank, or may be an integral part of the tank structural design, e.g., a horizontal cylindrical tank equipped with a hatch.

(ii) The fixed roof shall be installed in a manner such that there are no visible cracks, holes, gaps, or other open spaces between roof section joints or between the interface of the roof edge and the tank wall.

(iii) Each opening in the fixed roof, and any manifold system associated with the fixed roof, shall be either:

(A) Equipped with a closure device designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the opening and the closure device; or

(B) Connected by a closed-vent system that is vented to a control device. The control device shall remove or destroy organics in the vent stream, and shall be operating whenever hazardous waste is managed in the tank, except as provided for

in Subsection R315-264-1084(c)(2)(iii)(B)(I) and (II).

(I) During periods when it is necessary to provide access to the tank for performing the activities of Subsection R315-264-1084(c)(2)(iii)(B)(II), venting of the vapor headspace underneath the fixed roof to the control device is not required, opening of closure devices is allowed, and removal of the fixed roof is allowed. Following completion of the activity, the owner or operator shall promptly secure the closure device in the closed position or reinstall the cover, as applicable, and resume operation of the control device.

(II) During periods of routine inspection, maintenance, or other activities needed for normal operations, and for removal of accumulated sludge or other residues from the bottom of the tank.

(iv) The fixed roof and its closure devices shall be made of suitable materials that will minimize exposure of the hazardous waste to the atmosphere, to the extent practical, and will maintain the integrity of the fixed roof and closure devices throughout their intended service life. Factors to be considered when selecting the materials for and designing the fixed roof and closure devices shall include: Organic vapor permeability, the effects of any contact with the hazardous waste or its vapors managed in the tank; the effects of outdoor exposure to wind, moisture, and sunlight; and the operating practices used for the tank on which the fixed roof is installed.

(3) Whenever a hazardous waste is in the tank, the fixed roof shall be installed with each closure device secured in the closed position except as follows:

(i) Opening of closure devices or removal of the fixed roof is allowed at the following times:

(A) To provide access to the tank for performing routine inspection, maintenance, or other activities needed for normal operations. Examples of such activities include those times when a worker needs to open a port to sample the liquid in the tank, or when a worker needs to open a hatch to maintain or repair equipment. Following completion of the activity, the owner or operator shall promptly secure the closure device in the closed position or reinstall the cover, as applicable, to the tank.

(B) To remove accumulated sludge or other residues from the bottom of tank.

(ii) Opening of a spring-loaded pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device which vents to the atmosphere is allowed during normal operations for the purpose of maintaining the tank internal pressure in accordance with the tank design specifications. The device shall be designed to operate with no detectable organic emissions when the device is secured in the closed position. The settings at which the device opens shall be established such that the device remains in the closed position whenever the tank internal pressure is within the internal pressure operating range determined by the owner or operator based on the tank manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, ignitable, explosive, reactive, or hazardous materials. Examples of normal operating conditions that may require these devices to open are during those times when the tank internal pressure exceeds the internal pressure operating range for the tank as a result of loading operations or diurnal ambient temperature fluctuations.

(iii) Opening of a safety device, as defined in 40 CFR 265.1081, which is adopted by reference, is allowed at any time conditions require doing so to avoid an unsafe condition.

(4) The owner or operator shall inspect the air emission control equipment in accordance with the following requirements.

(i) The fixed roof and its closure devices shall be visually inspected by the owner or operator to check for defects that

could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the roof sections or between the roof and the tank wall; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.

(ii) The owner or operator shall perform an initial inspection of the fixed roof and its closure devices on or before the date that the tank becomes subject to Section R315-264-1084. Thereafter, the owner or operator shall perform the inspections at least once every year except under the special conditions provided for in Subsection R315-264-1084(l).

(iii) In the event that a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of Subsection R315-264-1084(k).

(iv) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in Subsection R315-264-1089(b).

(d) Owners and operators controlling air pollutant emissions from a tank using Tank Level 2 controls shall use one of the following tanks:

(1) A fixed-roof tank equipped with an internal floating roof in accordance with the requirements specified in Subsection R315-264-1084(e);

(2) A tank equipped with an external floating roof in accordance with the requirements specified in Subsection R315-264-1084(f)

(3) A tank vented through a closed-vent system to a control device in accordance with the requirements specified in Subsection R315-264-1084(g);

(4) A pressure tank designed and operated in accordance with the requirements specified in Subsection R315-264-1084(h); or

(5) A tank located inside an enclosure that is vented through a closed-vent system to an enclosed combustion control device in accordance with the requirements specified in Subsection R315-264-1084(i).

(e) The owner or operator who controls air pollutant emissions from a tank using a fixed roof with an internal floating roof shall meet the requirements specified in Subsections R315-264-1084(e)(1) through (e)(3).

(1) The tank shall be equipped with a fixed roof and an internal floating roof in accordance with the following requirements:

(i) The internal floating roof shall be designed to float on the liquid surface except when the floating roof shall be supported by the leg supports.

(ii) The internal floating roof shall be equipped with a continuous seal between the wall of the tank and the floating roof edge that meets either of the following requirements:

(A) A single continuous seal that is either a liquid-mounted seal or a metallic shoe seal, as defined in 40 CFR 265.1081, which is adopted by reference; or

(B) Two continuous seals mounted one above the other. The lower seal may be a vapor-mounted seal.

(iii) The internal floating roof shall meet the following specifications:

(A) Each opening in a noncontact internal floating roof except for automatic bleeder vents, vacuum breaker vents, and the rim space vents is to provide a projection below the liquid surface.

(B) Each opening in the internal floating roof shall be equipped with a gasketed cover or a gasketed lid except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains.

(C) Each penetration of the internal floating roof for the purpose of sampling shall have a slit fabric cover that covers at least 90 percent of the opening.

(D) Each automatic bleeder vent and rim space vent shall

be gasketed.

(E) Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

(F) Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

(2) The owner or operator shall operate the tank in accordance with the following requirements:

(i) When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be completed as soon as practical.

(ii) Automatic bleeder vents are to be set closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the leg supports.

(iii) Prior to filling the tank, each cover, access hatch, gauge float well or lid on any opening in the internal floating roof shall be bolted or fastened closed, i.e., no visible gaps. Rim space vents are to be set to open only when the internal floating roof is not floating or when the pressure beneath the rim exceeds the manufacturer's recommended setting.

(3) The owner or operator shall inspect the internal floating roof in accordance with the procedures specified as follows:

(i) The floating roof and its closure devices shall be visually inspected by the owner or operator to check for defects that could result in air pollutant emissions. Defects include, but are not limited to: The internal floating roof is not floating on the surface of the liquid inside the tank; liquid has accumulated on top of the internal floating roof; any portion of the roof seals have detached from the roof rim; holes, tears, or other openings are visible in the seal fabric; the gaskets no longer close off the hazardous waste surface from the atmosphere; or the slotted membrane has more than 10 percent open area.

(ii) The owner or operator shall inspect the internal floating roof components as follows except as provided in Subsection R315-264-1084(e)(3)(iii):

(A) Visually inspect the internal floating roof components through openings on the fixed-roof, e.g., manholes and roof hatches, at least once every 12 months after initial fill, and

(B) Visually inspect the internal floating roof, primary seal, secondary seal, if one is in service, gaskets, slotted membranes, and sleeve seals, if any, each time the tank is emptied and degassed and at least every 10 years.

(iii) As an alternative to performing the inspections specified in Subsection R315-264-1084(e)(3)(ii) for an internal floating roof equipped with two continuous seals mounted one above the other, the owner or operator may visually inspect the internal floating roof, primary and secondary seals, gaskets, slotted membranes, and sleeve seals, if any, each time the tank is emptied and degassed and at least every 5 years.

(iv) Prior to each inspection required by Subsections R315-264-1084(e)(3)(ii) or (e)(3)(iii), the owner or operator shall notify the Director in advance of each inspection to provide the Director with the opportunity to have an observer present during the inspection. The owner or operator shall notify the Director of the date and location of the inspection as follows:

(A) Prior to each visual inspection of an internal floating roof in a tank that has been emptied and degassed, written notification shall be prepared and sent by the owner or operator so that it is received by the Director at least 30 calendar days before refilling the tank except when an inspection is not planned as provided for in Subsection R315-264-1084(e)(3)(iv)(B).

(B) When a visual inspection is not planned and the owner or operator could not have known about the inspection 30 calendar days before refilling the tank, the owner or operator shall notify the Director as soon as possible, but no later than 7

calendar days before refilling of the tank. This notification may be made by telephone and immediately followed by a written explanation for why the inspection is unplanned. Alternatively, written notification, including the explanation for the unplanned inspection, may be sent so that it is received by the Director at least 7 calendar days before refilling the tank.

(v) In the event that a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of Subsection R315-264-1084(k).

(vi) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in Subsection R315-264-1089(b).

(4) Safety devices, as defined in 40 CFR 265.1081, which is adopted by reference, may be installed and operated as necessary on any tank complying with the requirements of Subsection R315-264-1084(e).

(f) The owner or operator who controls air pollutant emissions from a tank using an external floating roof shall meet the requirements specified in Subsections R315-264-1084(f)(1) through (f)(3).

(1) The owner or operator shall design the external floating roof in accordance with the following requirements:

(i) The external floating roof shall be designed to float on the liquid surface except when the floating roof shall be supported by the leg supports.

(ii) The floating roof shall be equipped with two continuous seals, one above the other, between the wall of the tank and the roof edge. The lower seal is referred to as the primary seal, and the upper seal is referred to as the secondary seal.

(A) The primary seal shall be a liquid-mounted seal or a metallic shoe seal, as defined in 40 CFR 265.1081, which is adopted by reference. The total area of the gaps between the tank wall and the primary seal shall not exceed 212 square centimeters per meter of tank diameter, and the width of any portion of these gaps shall not exceed 3.8 centimeters. If a metallic shoe seal is used for the primary seal, the metallic shoe seal shall be designed so that one end extends into the liquid in the tank and the other end extends a vertical distance of at least 61 centimeters above the liquid surface.

(B) The secondary seal shall be mounted above the primary seal and cover the annular space between the floating roof and the wall of the tank. The total area of the gaps between the tank wall and the secondary seal shall not exceed 21.2 square centimeters per meter of tank diameter, and the width of any portion of these gaps shall not exceed 1.3 centimeters.

(iii) The external floating roof shall meet the following specifications:

(A) Except for automatic bleeder vents, vacuum breaker vents, and rim space vents, each opening in a noncontact external floating roof shall provide a projection below the liquid surface.

(B) Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof shall be equipped with a gasketed cover, seal, or lid.

(C) Each access hatch and each gauge float well shall be equipped with a cover designed to be bolted or fastened when the cover is secured in the closed position.

(D) Each automatic bleeder vent and each rim space vent shall be equipped with a gasket.

(E) Each roof drain that empties into the liquid managed in the tank shall be equipped with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening.

(F) Each unslotted and slotted guide pole well shall be equipped with a gasketed sliding cover or a flexible fabric sleeve seal.

(G) Each unslotted guide pole shall be equipped with a gasketed cap on the end of the pole.

(H) Each slotted guide pole shall be equipped with a

gasketed float or other device which closes off the liquid surface from the atmosphere.

(1) Each gauge hatch and each sample well shall be equipped with a gasketed cover.

(2) The owner or operator shall operate the tank in accordance with the following requirements:

(i) When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be completed as soon as practical.

(ii) Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof shall be secured and maintained in a closed position at all times except when the closure device shall be open for access.

(iii) Covers on each access hatch and each gauge float well shall be bolted or fastened when secured in the closed position.

(iv) Automatic bleeder vents shall be set closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the leg supports.

(v) Rim space vents shall be set to open only at those times that the roof is being floated off the roof leg supports or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

(vi) The cap on the end of each unslotted guide pole shall be secured in the closed position at all times except when measuring the level or collecting samples of the liquid in the tank.

(vii) The cover on each gauge hatch or sample well shall be secured in the closed position at all times except when the hatch or well shall be opened for access.

(viii) Both the primary seal and the secondary seal shall completely cover the annular space between the external floating roof and the wall of the tank in a continuous fashion except during inspections.

(3) The owner or operator shall inspect the external floating roof in accordance with the procedures specified as follows:

(i) The owner or operator shall measure the external floating roof seal gaps in accordance with the following requirements:

(A) The owner or operator shall perform measurements of gaps between the tank wall and the primary seal within 60 calendar days after initial operation of the tank following installation of the floating roof and, thereafter, at least once every 5 years.

(B) The owner or operator shall perform measurements of gaps between the tank wall and the secondary seal within 60 calendar days after initial operation of the tank following installation of the floating roof and, thereafter, at least once every year.

(C) If a tank ceases to hold hazardous waste for a period of 1 year or more, subsequent introduction of hazardous waste into the tank shall be considered an initial operation for the purposes of Subsections R315-264-1084(f)(3)(i)(A) and (f)(3)(i)(B).

(D) The owner or operator shall determine the total surface area of gaps in the primary seal and in the secondary seal individually using the following procedure:

(1) The seal gap measurements shall be performed at one or more floating roof levels when the roof is floating off the roof supports.

(2) Seal gaps, if any, shall be measured around the entire perimeter of the floating roof in each place where a 0.32-centimeter diameter uniform probe passes freely, without forcing or binding against the seal, between the seal and the wall of the tank and measure the circumferential distance of each such location.

(3) For a seal gap measured under Subsection R315-264-1084(f)(3), the gap surface area shall be determined by using probes of various widths to measure accurately the actual

distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance.

(4) The total gap area shall be calculated by adding the gap surface areas determined for each identified gap location for the primary seal and the secondary seal individually, and then dividing the sum for each seal type by the nominal diameter of the tank. These total gap areas for the primary seal and secondary seal are then compared to the respective standards for the seal type as specified in Subsection R315-264-1084(f)(1)(ii).

(E) In the event that the seal gap measurements do not conform to the specifications in Subsection R315-264-1084(f)(1)(ii), the owner or operator shall repair the defect in accordance with the requirements of Subsection R315-264-1084(k).

(F) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in Subsection R315-264-1089(b).

(ii) The owner or operator shall visually inspect the external floating roof in accordance with the following requirements:

(A) The floating roof and its closure devices shall be visually inspected by the owner or operator to check for defects that could result in air pollutant emissions. Defects include, but are not limited to: Holes, tears, or other openings in the rim seal or seal fabric of the floating roof; a rim seal detached from the floating roof; all or a portion of the floating roof deck being submerged below the surface of the liquid in the tank; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.

(B) The owner or operator shall perform an initial inspection of the external floating roof and its closure devices on or before the date that the tank becomes subject to Section R315-264-1084. Thereafter, the owner or operator shall perform the inspections at least once every year except for the special conditions provided for in Subsection R315-264-1084(l).

(C) In the event that a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of Subsection R315-264-1084(k).

(D) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in Subsection R315-264-1089(b).

(iii) Prior to each inspection required by Subsections R315-264-1084(f)(3)(i) or (f)(3)(ii), the owner or operator shall notify the Director in advance of each inspection to provide the Director with the opportunity to have an observer present during the inspection. The owner or operator shall notify the Director of the date and location of the inspection as follows:

(A) Prior to each inspection to measure external floating roof seal gaps as required under Subsection R315-264-1084(f)(3)(i), written notification shall be prepared and sent by the owner or operator so that it is received by the Director at least 30 calendar days before the date the measurements are scheduled to be performed.

(B) Prior to each visual inspection of an external floating roof in a tank that has been emptied and degassed, written notification shall be prepared and sent by the owner or operator so that it is received by the Director at least 30 calendar days before refilling the tank except when an inspection is not planned as provided for in Subsection R315-264-1084(f)(3)(iii)(C).

(C) When a visual inspection is not planned and the owner or operator could not have known about the inspection 30 calendar days before refilling the tank, the owner or operator shall notify the Director as soon as possible, but no later than 7 calendar days before refilling of the tank. This notification may be made by telephone and immediately followed by a written explanation for why the inspection is unplanned. Alternatively,

written notification, including the explanation for the unplanned inspection, may be sent so that it is received by the Director at least 7 calendar days before refilling the tank.

(4) Safety devices, as defined in 40 CFR 265.1081, which is adopted by reference, may be installed and operated as necessary on any tank complying with the requirements of Subsection R315-264-1084(f).

(g) The owner or operator who controls air pollutant emissions from a tank by venting the tank to a control device shall meet the requirements specified in Subsections R315-264-1084(g)(1) through (g)(3).

(1) The tank shall be covered by a fixed roof and vented directly through a closed-vent system to a control device in accordance with the following requirements:

(i) The fixed roof and its closure devices shall be designed to form a continuous barrier over the entire surface area of the liquid in the tank.

(ii) Each opening in the fixed roof not vented to the control device shall be equipped with a closure device. If the pressure in the vapor headspace underneath the fixed roof is less than atmospheric pressure when the control device is operating, the closure devices shall be designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the cover opening and the closure device. If the pressure in the vapor headspace underneath the fixed roof is equal to or greater than atmospheric pressure when the control device is operating, the closure device shall be designed to operate with no detectable organic emissions.

(iii) The fixed roof and its closure devices shall be made of suitable materials that will minimize exposure of the hazardous waste to the atmosphere, to the extent practical, and will maintain the integrity of the fixed roof and closure devices throughout their intended service life. Factors to be considered when selecting the materials for and designing the fixed roof and closure devices shall include: Organic vapor permeability, the effects of any contact with the liquid and its vapor managed in the tank; the effects of outdoor exposure to wind, moisture, and sunlight; and the operating practices used for the tank on which the fixed roof is installed.

(iv) The closed-vent system and control device shall be designed and operated in accordance with the requirements of Section R315-264-1087.

(2) Whenever a hazardous waste is in the tank, the fixed roof shall be installed with each closure device secured in the closed position and the vapor headspace underneath the fixed roof vented to the control device except as follows:

(i) Venting to the control device is not required, and opening of closure devices or removal of the fixed roof is allowed at the following times:

(A) To provide access to the tank for performing routine inspection, maintenance, or other activities needed for normal operations. Examples of such activities include those times when a worker needs to open a port to sample liquid in the tank, or when a worker needs to open a hatch to maintain or repair equipment. Following completion of the activity, the owner or operator shall promptly secure the closure device in the closed position or reinstall the cover, as applicable, to the tank.

(B) To remove accumulated sludge or other residues from the bottom of a tank.

(ii) Opening of a safety device, as defined in 40 CFR 265.1081, which is adopted by reference, is allowed at any time conditions require doing so to avoid an unsafe condition.

(3) The owner or operator shall inspect and monitor the air emission control equipment in accordance with the following procedures:

(i) The fixed roof and its closure devices shall be visually inspected by the owner or operator to check for defects that

could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the roof sections or between the roof and the tank wall; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.

(ii) The closed-vent system and control device shall be inspected and monitored by the owner or operator in accordance with the procedures specified in Section R315-264-1087.

(iii) The owner or operator shall perform an initial inspection of the air emission control equipment on or before the date that the tank becomes subject to Section R315-264-1084. Thereafter, the owner or operator shall perform the inspections at least once every year except for the special conditions provided for in Subsection R315-264-1084(l).

(iv) In the event that a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of Subsection R315-264-1084(k).

(v) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in Subsection R315-264-1089(b).

(h) The owner or operator who controls air pollutant emissions by using a pressure tank shall meet the following requirements.

(1) The tank shall be designed not to vent to the atmosphere as a result of compression of the vapor headspace in the tank during filling of the tank to its design capacity.

(2) All tank openings shall be equipped with closure devices designed to operate with no detectable organic emissions as determined using the procedure specified in Subsection R315-264-1083(d).

(3) Whenever a hazardous waste is in the tank, the tank shall be operated as a closed system that does not vent to the atmosphere except under either of the following conditions as specified in Subsections R315-264-1084(h)(3)(i) or (h)(3)(ii).

(i) At those times when opening of a safety device, as defined in 40 CFR 265.1081, which is adopted by reference, is required to avoid an unsafe condition.

(ii) At those times when purging of inerts from the tank is required and the purge stream is routed to a closed-vent system and control device designed and operated in accordance with the requirements of Section R315-264-1087.

(i) The owner or operator who controls air pollutant emissions by using an enclosure vented through a closed-vent system to an enclosed combustion control device shall meet the requirements specified in Subsections R315-264-1084(i)(1) through (i)(4).

(1) The tank shall be located inside an enclosure. The enclosure shall be designed and operated in accordance with the criteria for a permanent total enclosure as specified in "Procedure T-Criteria for and Verification of a Permanent or Temporary Total Enclosure" under 40 CFR 52.741, appendix B. The enclosure may have permanent or temporary openings to allow worker access; passage of material into or out of the enclosure by conveyor, vehicles, or other mechanical means; entry of permanent mechanical or electrical equipment; or direct airflow into the enclosure. The owner or operator shall perform the verification procedure for the enclosure as specified in Section 5.0 to "Procedure T-Criteria for and Verification of a Permanent or Temporary Total Enclosure" initially when the enclosure is first installed and, thereafter, annually.

(2) The enclosure shall be vented through a closed-vent system to an enclosed combustion control device that is designed and operated in accordance with the standards for either a vapor incinerator, boiler, or process heater specified in Section R315-264-1087.

(3) Safety devices, as defined in 40 CFR 265.1081, which is adopted by reference, may be installed and operated as necessary on any enclosure, closed-vent system, or control

device used to comply with the requirements of Subsections R315-264-1084(i)(1) and (i)(2).

(4) The owner or operator shall inspect and monitor the closed-vent system and control device as specified in Section R315-264-1087.

(j) The owner or operator shall transfer hazardous waste to a tank subject to Section R315-264-1084 in accordance with the following requirements:

(1) Transfer of hazardous waste, except as provided in Subsection R315-264-1084(j)(2), to the tank from another tank subject to Section R315-264-1084 or from a surface impoundment subject to Section R315-264-1085 shall be conducted using continuous hard-piping or another closed system that does not allow exposure of the hazardous waste to the atmosphere. For the purpose of complying with this provision, an individual drain system is considered to be a closed system when it meets the requirements of Subsection R307-214-2(29), which incorporates 40 CFR part 63, subpart RR-National Emission Standards for Individual Drain Systems.

(2) The requirements of Subsection R315-264-1084(j)(1) do not apply when transferring a hazardous waste to the tank under any of the following conditions:

(i) The hazardous waste meets the average VO concentration conditions specified in Subsection R315-264-1082(c)(1) at the point of waste origination.

(ii) The hazardous waste has been treated by an organic destruction or removal process to meet the requirements in Subsection R315-264-1082(c)(2).

(iii) The hazardous waste meets the requirements of Subsection R315-264-1082(c)(4).

(k) The owner or operator shall repair each defect detected during an inspection performed in accordance with the requirements of Subsections R315-264-1084(c)(4), (e)(3), (f)(3), or (g)(3) as follows:

(1) The owner or operator shall make first efforts at repair of the defect no later than 5 calendar days after detection, and repair shall be completed as soon as possible but no later than 45 calendar days after detection except as provided in Subsection R315-264-1084(k)(2).

(2) Repair of a defect may be delayed beyond 45 calendar days if the owner or operator determines that repair of the defect requires emptying or temporary removal from service of the tank and no alternative tank capacity is available at the site to accept the hazardous waste normally managed in the tank. In this case, the owner or operator shall repair the defect the next time the process or unit that is generating the hazardous waste managed in the tank stops operation. Repair of the defect shall be completed before the process or unit resumes operation.

(l) Following the initial inspection and monitoring of the cover as required by the applicable provisions of Sections R315-264-1080 through 1090, subsequent inspection and monitoring may be performed at intervals longer than 1 year under the following special conditions:

(1) In the case when inspecting or monitoring the cover would expose a worker to dangerous, hazardous, or other unsafe conditions, then the owner or operator may designate a cover as an "unsafe to inspect and monitor cover" and comply with all of the following requirements:

(i) Prepare a written explanation for the cover stating the reasons why the cover is unsafe to visually inspect or to monitor, if required.

(ii) Develop and implement a written plan and schedule to inspect and monitor the cover, using the procedures specified in the applicable section of Sections R315-264-1080 through 1090, as frequently as practicable during those times when a worker can safely access the cover.

(2) In the case when a tank is buried partially or entirely underground, an owner or operator is required to inspect and monitor, as required by the applicable provisions of Section

R315-264-1084, only those portions of the tank cover and those connections to the tank, e.g., fill ports, access hatches, gauge wells, etc., that are located on or above the ground surface.

R315-264-1085. Standards: Surface Impoundments.

(a) The provisions of Section R315-264-1085 apply to the control of air pollutant emissions from surface impoundments for which Subsection R315-264-1082(b) references the use of Section R315-264-1085 for such air emission control.

(b) The owner or operator shall control air pollutant emissions from the surface impoundment by installing and operating either of the following:

(1) A floating membrane cover in accordance with the provisions specified in Subsection R315-264-1085(c); or

(2) A cover that is vented through a closed-vent system to a control device in accordance with the provisions specified in Subsection R315-264-1085(d).

(c) The owner or operator who controls air pollutant emissions from a surface impoundment using a floating membrane cover shall meet the requirements specified in Subsections R315-264-1085(c)(1) through (c)(3).

(1) The surface impoundment shall be equipped with a floating membrane cover designed to meet the following specifications:

(i) The floating membrane cover shall be designed to float on the liquid surface during normal operations and form a continuous barrier over the entire surface area of the liquid.

(ii) The cover shall be fabricated from a synthetic membrane material that is either:

(A) High density polyethylene (HDPE) with a thickness no less than 2.5 millimeters; or

(B) A material or a composite of different materials determined to have both organic permeability properties that are equivalent to those of the material listed in Subsection R315-264-1085(c)(1)(ii)(A) and chemical and physical properties that maintain the material integrity for the intended service life of the material.

(iii) The cover shall be installed in a manner such that there are no visible cracks, holes, gaps, or other open spaces between cover section seams or between the interface of the cover edge and its foundation mountings.

(iv) Except as provided for in Subsection R315-264-1085(c)(1)(v), each opening in the floating membrane cover shall be equipped with a closure device designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the cover opening and the closure device.

(v) The floating membrane cover may be equipped with one or more emergency cover drains for removal of stormwater. Each emergency cover drain shall be equipped with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening or a flexible fabric sleeve seal.

(vi) The closure devices shall be made of suitable materials that will minimize exposure of the hazardous waste to the atmosphere, to the extent practical, and will maintain the integrity of the closure devices throughout their intended service life. Factors to be considered when selecting the materials of construction and designing the cover and closure devices shall include: Organic vapor permeability; the effects of any contact with the liquid and its vapor managed in the surface impoundment; the effects of outdoor exposure to wind, moisture, and sunlight; and the operating practices used for the surface impoundment on which the floating membrane cover is installed.

(2) Whenever a hazardous waste is in the surface impoundment, the floating membrane cover shall float on the liquid and each closure device shall be secured in the closed position except as follows:

(i) Opening of closure devices or removal of the cover is allowed at the following times:

(A) To provide access to the surface impoundment for performing routine inspection, maintenance, or other activities needed for normal operations. Examples of such activities include those times when a worker needs to open a port to sample the liquid in the surface impoundment, or when a worker needs to open a hatch to maintain or repair equipment. Following completion of the activity, the owner or operator shall promptly replace the cover and secure the closure device in the closed position, as applicable.

(B) To remove accumulated sludge or other residues from the bottom of surface impoundment.

(ii) Opening of a safety device, as defined in 40 CFR 265.1081, which is adopted by reference, is allowed at any time conditions require doing so to avoid an unsafe condition.

(3) The owner or operator shall inspect the floating membrane cover in accordance with the following procedures:

(i) The floating membrane cover and its closure devices shall be visually inspected by the owner or operator to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the cover section seams or between the interface of the cover edge and its foundation mountings; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.

(ii) The owner or operator shall perform an initial inspection of the floating membrane cover and its closure devices on or before the date that the surface impoundment becomes subject to Section R315-264-1085. Thereafter, the owner or operator shall perform the inspections at least once every year except for the special conditions provided for in Subsection R315-264-1085(g).

(iii) In the event that a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of Subsection R315-264-1085(f).

(iv) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in Subsection R315-264-1089(c).

(d) The owner or operator who controls air pollutant emissions from a surface impoundment using a cover vented to a control device shall meet the requirements specified in Subsections R315-264-1085(d)(1) through (d)(3).

(1) The surface impoundment shall be covered by a cover and vented directly through a closed-vent system to a control device in accordance with the following requirements:

(i) The cover and its closure devices shall be designed to form a continuous barrier over the entire surface area of the liquid in the surface impoundment.

(ii) Each opening in the cover not vented to the control device shall be equipped with a closure device. If the pressure in the vapor headspace underneath the cover is less than atmospheric pressure when the control device is operating, the closure devices shall be designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the cover opening and the closure device. If the pressure in the vapor headspace underneath the cover is equal to or greater than atmospheric pressure when the control device is operating, the closure device shall be designed to operate with no detectable organic emissions using the procedure specified in Subsection R315-264-1083(d).

(iii) The cover and its closure devices shall be made of suitable materials that will minimize exposure of the hazardous waste to the atmosphere, to the extent practical, and will maintain the integrity of the cover and closure devices throughout their intended service life. Factors to be considered

when selecting the materials of construction and designing the cover and closure devices shall include: Organic vapor permeability; the effects of any contact with the liquid or its vapors managed in the surface impoundment; the effects of outdoor exposure to wind, moisture, and sunlight; and the operating practices used for the surface impoundment on which the cover is installed.

(iv) The closed-vent system and control device shall be designed and operated in accordance with the requirements of Section R315-264-1087.

(2) Whenever a hazardous waste is in the surface impoundment, the cover shall be installed with each closure device secured in the closed position and the vapor headspace underneath the cover vented to the control device except as follows:

(i) Venting to the control device is not required, and opening of closure devices or removal of the cover is allowed at the following times:

(A) To provide access to the surface impoundment for performing routine inspection, maintenance, or other activities needed for normal operations. Examples of such activities include those times when a worker needs to open a port to sample liquid in the surface impoundment, or when a worker needs to open a hatch to maintain or repair equipment. Following completion of the activity, the owner or operator shall promptly secure the closure device in the closed position or reinstall the cover, as applicable, to the surface impoundment.

(B) To remove accumulated sludge or other residues from the bottom of the surface impoundment.

(ii) Opening of a safety device, as defined in 40 CFR 265.1081, which is adopted by reference, is allowed at any time conditions require doing so to avoid an unsafe condition.

(3) The owner or operator shall inspect and monitor the air emission control equipment in accordance with the following procedures:

(i) The surface impoundment cover and its closure devices shall be visually inspected by the owner or operator to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the cover section seams or between the interface of the cover edge and its foundation mountings; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.

(ii) The closed-vent system and control device shall be inspected and monitored by the owner or operator in accordance with the procedures specified in Section R315-264-1087.

(iii) The owner or operator shall perform an initial inspection of the air emission control equipment on or before the date that the surface impoundment becomes subject to Section R315-264-1085. Thereafter, the owner or operator shall perform the inspections at least once every year except for the special conditions provided for in Subsection R315-264-1085(g).

(iv) In the event that a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of Subsection R315-264-1085(f).

(v) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in Subsection R315-264-1089(c).

(e) The owner or operator shall transfer hazardous waste to a surface impoundment subject to Section R315-264-1085 in accordance with the following requirements:

(1) Transfer of hazardous waste, except as provided in Subsection R315-264-1085(e)(2), to the surface impoundment from another surface impoundment subject to Section R315-264-1085 or from a tank subject to Section R315-264-1084 shall be conducted using continuous hard-piping or another closed system that does not allow exposure of the waste to the

atmosphere. For the purpose of complying with this provision, an individual drain system is considered to be a closed system when it meets the requirements of Subsection R307-214-2(29), which incorporates 40 CFR part 63, subpart RR-National Emission Standards for Individual Drain Systems.

(2) The requirements of Subsection R315-264-1085(e)(1) do not apply when transferring a hazardous waste to the surface impoundment under either of the following conditions:

(i) The hazardous waste meets the average VO concentration conditions specified in Subsection R315-264-1082(c)(1) at the point of waste origination.

(ii) The hazardous waste has been treated by an organic destruction or removal process to meet the requirements in Subsection R315-264-1082(c)(2).

(iii) The hazardous waste meets the requirements of Subsection R315-264-1082(c)(4).

(f) The owner or operator shall repair each defect detected during an inspection performed in accordance with the requirements of Subsections R315-264-1085(c)(3) or (d)(3) as follows:

(1) The owner or operator shall make first efforts at repair of the defect no later than 5 calendar days after detection and repair shall be completed as soon as possible but no later than 45 calendar days after detection except as provided in Subsection R315-264-1085(f)(2).

(2) Repair of a defect may be delayed beyond 45 calendar days if the owner or operator determines that repair of the defect requires emptying or temporary removal from service of the surface impoundment and no alternative capacity is available at the site to accept the hazardous waste normally managed in the surface impoundment. In this case, the owner or operator shall repair the defect the next time the process or unit that is generating the hazardous waste managed in the surface impoundment stops operation. Repair of the defect shall be completed before the process or unit resumes operation.

(g) Following the initial inspection and monitoring of the cover as required by the applicable provisions of Sections R315-264-1080 through 1090, subsequent inspection and monitoring may be performed at intervals longer than 1 year in the case when inspecting or monitoring the cover would expose a worker to dangerous, hazardous, or other unsafe conditions. In this case, the owner or operator may designate the cover as an "unsafe to inspect and monitor cover" and comply with all of the following requirements:

(1) Prepare a written explanation for the cover stating the reasons why the cover is unsafe to visually inspect or to monitor, if required.

(2) Develop and implement a written plan and schedule to inspect and monitor the cover using the procedures specified in the applicable section of Sections R315-264-1080 through 1090 as frequently as practicable during those times when a worker can safely access the cover.

R315-264-1086. Standards: Containers.

(a) The provisions of Section R315-264-1086 apply to the control of air pollutant emissions from containers for which Subsection R315-264-1082(b) references the use of Section R315-264-1086 for such air emission control.

(b) General requirements.

(1) The owner or operator shall control air pollutant emissions from each container subject to Section R315-264-1086 in accordance with the following requirements, as applicable to the container, except when the special provisions for waste stabilization processes specified in Subsection R315-264-1086(b)(2) apply to the container.

(i) For a container having a design capacity greater than 0.1 cubic meters and less than or equal to 0.46 cubic meters, the owner or operator shall control air pollutant emissions from the container in accordance with the Container Level 1 standards

specified in Subsection R315-264-1086(c).

(ii) For a container having a design capacity greater than 0.46 cubic meters that is not in light material service, the owner or operator shall control air pollutant emissions from the container in accordance with the Container Level 1 standards specified in Subsection R315-264-1086(c).

(iii) For a container having a design capacity greater than 0.46 cubic meters that is in light material service, the owner or operator shall control air pollutant emissions from the container in accordance with the Container Level 2 standards specified in Subsection R315-264-1086(d).

(2) When a container having a design capacity greater than 0.1 cubic meters is used for treatment of a hazardous waste by a waste stabilization process, the owner or operator shall control air pollutant emissions from the container in accordance with the Container Level 3 standards specified in Subsection R315-264-1086(e) at those times during the waste stabilization process when the hazardous waste in the container is exposed to the atmosphere.

(c) Container Level 1 standards.

(1) A container using Container Level 1 controls is one of the following:

(i) A container that meets the applicable U.S. Department of Transportation (DOT) regulations on packaging hazardous materials for transportation as specified in Subsection R315-264-1086(f).

(ii) A container equipped with a cover and closure devices that form a continuous barrier over the container openings such that when the cover and closure devices are secured in the closed position there are no visible holes, gaps, or other open spaces into the interior of the container. The cover may be a separate cover installed on the container, e.g., a lid on a drum or a suitably secured tarp on a roll-off box, or may be an integral part of the container structural design, e.g., a "portable tank" or bulk cargo container equipped with a screw-type cap.

(iii) An open-top container in which an organic-vapor suppressing barrier is placed on or over the hazardous waste in the container such that no hazardous waste is exposed to the atmosphere. One example of such a barrier is application of a suitable organic-vapor suppressing foam.

(2) A container used to meet the requirements of Subsections R315-264-1086(c)(1)(ii) or (c)(1)(iii) shall be equipped with covers and closure devices, as applicable to the container, that are composed of suitable materials to minimize exposure of the hazardous waste to the atmosphere and to maintain the equipment integrity, for as long as the container is in service. Factors to be considered in selecting the materials of construction and designing the cover and closure devices shall include: Organic vapor permeability; the effects of contact with the hazardous waste or its vapor managed in the container; the effects of outdoor exposure of the closure device or cover material to wind, moisture, and sunlight; and the operating practices for which the container is intended to be used.

(3) Whenever a hazardous waste is in a container using Container Level 1 controls, the owner or operator shall install all covers and closure devices for the container, as applicable to the container, and secure and maintain each closure device in the closed position except as follows:

(i) Opening of a closure device or cover is allowed for the purpose of adding hazardous waste or other material to the container as follows:

(A) In the case when the container is filled to the intended final level in one continuous operation, the owner or operator shall promptly secure the closure devices in the closed position and install the covers, as applicable to the container, upon conclusion of the filling operation.

(B) In the case when discrete quantities or batches of material intermittently are added to the container over a period of time, the owner or operator shall promptly secure the closure

devices in the closed position and install covers, as applicable to the container, upon either the container being filled to the intended final level; the completion of a batch loading after which no additional material will be added to the container within 15 minutes; the person performing the loading operation leaving the immediate vicinity of the container; or the shutdown of the process generating the material being added to the container, whichever condition occurs first.

(ii) Opening of a closure device or cover is allowed for the purpose of removing hazardous waste from the container as follows:

(A) For the purpose of meeting the requirements of Section R315-264-1086, an empty container as defined in Subsection R315-261-7(b) may be open to the atmosphere at any time, i.e., covers and closure devices are not required to be secured in the closed position on an empty container.

(B) In the case when discrete quantities or batches of material are removed from the container but the container does not meet the conditions to be an empty container as defined in Subsection R315-261-7(b), the owner or operator shall promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon the completion of a batch removal after which no additional material will be removed from the container within 15 minutes or the person performing the unloading operation leaves the immediate vicinity of the container, whichever condition occurs first.

(iii) Opening of a closure device or cover is allowed when access inside the container is needed to perform routine activities other than transfer of hazardous waste. Examples of such activities include those times when a worker needs to open a port to measure the depth of or sample the material in the container, or when a worker needs to open a manhole hatch to access equipment inside the container. Following completion of the activity, the owner or operator shall promptly secure the closure device in the closed position or reinstall the cover, as applicable to the container.

(iv) Opening of a spring-loaded pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device which vents to the atmosphere is allowed during normal operations for the purpose of maintaining the internal pressure of the container in accordance with the container design specifications. The device shall be designed to operate with no detectable organic emissions when the device is secured in the closed position. The settings at which the device opens shall be established such that the device remains in the closed position whenever the internal pressure of the container is within the internal pressure operating range determined by the owner or operator based on container manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, ignitable, explosive, reactive, or hazardous materials. Examples of normal operating conditions that may require these devices to open are during those times when the internal pressure of the container exceeds the internal pressure operating range for the container as a result of loading operations or diurnal ambient temperature fluctuations.

(v) Opening of a safety device, as defined in 40 CFR 265.1081, which is adopted by reference, is allowed at any time conditions require doing so to avoid an unsafe condition.

(4) The owner or operator of containers using Container Level 1 controls shall inspect the containers and their covers and closure devices as follows:

(i) In the case when a hazardous waste already is in the container at the time the owner or operator first accepts possession of the container at the facility and the container is not emptied within 24 hours after the container is accepted at the facility, i.e., does not meet the conditions for an empty

container as specified in Subsection R315-261-7(b), the owner or operator shall visually inspect the container and its cover and closure devices to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. The container visual inspection shall be conducted on or before the date that the container is accepted at the facility, i.e., the date the container becomes subject to container standards of Sections R315-264-1080 through 1090. For purposes of this requirement, the date of acceptance is the date of signature that the facility owner or operator enters on Item 20 of the Uniform Hazardous Waste Manifest in the appendix to Rule R315-262 (EPA Forms 8700-22 and 8700-22A), as required under Section R315-264-71. If a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of Subsection R315-264-1086(c)(4)(iii).

(ii) In the case when a container used for managing hazardous waste remains at the facility for a period of 1 year or more, the owner or operator shall visually inspect the container and its cover and closure devices initially and thereafter, at least once every 12 months, to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. If a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of Subsection R315-264-1086(c)(4)(iii).

(iii) When a defect is detected for the container, cover, or closure devices, the owner or operator shall make first efforts at repair of the defect no later than 24 hours after detection and repair shall be completed as soon as possible but no later than 5 calendar days after detection. If repair of a defect cannot be completed within 5 calendar days, then the hazardous waste shall be removed from the container and the container shall not be used to manage hazardous waste until the defect is repaired.

(5) The owner or operator shall maintain at the facility a copy of the procedure used to determine that containers with capacity of 0.46 cubic meters or greater, which do not meet applicable DOT regulations as specified in Subsection R315-264-1086(f), are not managing hazardous waste in light material service.

(d) Container Level 2 standards.

(1) A container using Container Level 2 controls is one of the following:

(i) A container that meets the applicable U.S. Department of Transportation (DOT) regulations on packaging hazardous materials for transportation as specified in Subsection R315-264-1086(f).

(ii) A container that operates with no detectable organic emissions as defined in 40 CFR 265.1081, which is adopted by reference, and determined in accordance with the procedure specified in Subsection R315-264-1086(g).

(iii) A container that has been demonstrated within the preceding 12 months to be vapor-tight by using 40 CFR part 60, appendix A, Method 27 in accordance with the procedure specified in Subsection R315-264-1086(h).

(2) Transfer of hazardous waste in or out of a container using Container Level 2 controls shall be conducted in such a manner as to minimize exposure of the hazardous waste to the atmosphere, to the extent practical, considering the physical properties of the hazardous waste and good engineering and safety practices for handling flammable, ignitable, explosive, reactive, or other hazardous materials. Examples of container loading procedures that the Director considers to meet the requirements of Subsection R315-264-1086(d) include using any one of the following: A submerged-fill pipe or other submerged-fill method to load liquids into the container; a vapor-balancing system or a vapor-recovery system to collect and control the vapors displaced from the container during filling operations; or a fitted opening in the top of a container

through which the hazardous waste is filled and subsequently purging the transfer line before removing it from the container opening.

(3) Whenever a hazardous waste is in a container using Container Level 2 controls, the owner or operator shall install all covers and closure devices for the container, and secure and maintain each closure device in the closed position except as follows:

(i) Opening of a closure device or cover is allowed for the purpose of adding hazardous waste or other material to the container as follows:

(A) In the case when the container is filled to the intended final level in one continuous operation, the owner or operator shall promptly secure the closure devices in the closed position and install the covers, as applicable to the container, upon conclusion of the filling operation.

(B) In the case when discrete quantities or batches of material intermittently are added to the container over a period of time, the owner or operator shall promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon either the container being filled to the intended final level; the completion of a batch loading after which no additional material will be added to the container within 15 minutes; the person performing the loading operation leaving the immediate vicinity of the container; or the shutdown of the process generating the material being added to the container, whichever condition occurs first.

(ii) Opening of a closure device or cover is allowed for the purpose of removing hazardous waste from the container as follows:

(A) For the purpose of meeting the requirements of Section R315-264-1086, an empty container as defined in Subsection R315-261-7(b) may be open to the atmosphere at any time, i.e., covers and closure devices are not required to be secured in the closed position on an empty container.

(B) In the case when discrete quantities or batches of material are removed from the container but the container does not meet the conditions to be an empty container as defined in Subsection R315-261-7(b), the owner or operator shall promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon the completion of a batch removal after which no additional material will be removed from the container within 15 minutes or the person performing the unloading operation leaves the immediate vicinity of the container, whichever condition occurs first.

(iii) Opening of a closure device or cover is allowed when access inside the container is needed to perform routine activities other than transfer of hazardous waste. Examples of such activities include those times when a worker needs to open a port to measure the depth of or sample the material in the container, or when a worker needs to open a manhole hatch to access equipment inside the container. Following completion of the activity, the owner or operator shall promptly secure the closure device in the closed position or reinstall the cover, as applicable to the container.

(iv) Opening of a spring-loaded, pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device which vents to the atmosphere is allowed during normal operations for the purpose of maintaining the internal pressure of the container in accordance with the container design specifications. The device shall be designed to operate with no detectable organic emission when the device is secured in the closed position. The settings at which the device opens shall be established such that the device remains in the closed position whenever the internal pressure of the container is within the internal pressure operating range determined by the owner or operator based on container manufacturer recommendations, applicable regulations, fire protection and prevention codes,

standard engineering codes and practices, or other requirements for the safe handling of flammable, ignitable, explosive, reactive, or hazardous materials. Examples of normal operating conditions that may require these devices to open are during those times when the internal pressure of the container exceeds the internal pressure operating range for the container as a result of loading operations or diurnal ambient temperature fluctuations.

(v) Opening of a safety device, as defined in 40 CFR 265.1081, which is adopted by reference, is allowed at any time conditions require doing so to avoid an unsafe condition.

(4) The owner or operator of containers using Container Level 2 controls shall inspect the containers and their covers and closure devices as follows:

(i) In the case when a hazardous waste already is in the container at the time the owner or operator first accepts possession of the container at the facility and the container is not emptied within 24 hours after the container is accepted at the facility, i.e., does not meet the conditions for an empty container as specified in Subsection R35-261-7(b), the owner or operator shall visually inspect the container and its cover and closure devices to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. The container visual inspection shall be conducted on or before the date that the container is accepted at the facility, i.e., the date the container becomes subject to the container standards of Sections R315-264-1080 through. For purposes of this requirement, the date of acceptance is the date of signature that the facility owner or operator enters on Item 20 of the Uniform Hazardous Waste Manifest in the appendix to Rule R315-262 (EPA Forms 8700-22 and 8700-22A), as required under Section R315-264-71. If a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of Subsection R315-264-1086(d)(4)(iii).

(ii) In the case when a container used for managing hazardous waste remains at the facility for a period of 1 year or more, the owner or operator shall visually inspect the container and its cover and closure devices initially and thereafter, at least once every 12 months, to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. If a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of Subsection R315-264-1086(d)(4)(iii).

(iii) When a defect is detected for the container, cover, or closure devices, the owner or operator shall make first efforts at repair of the defect no later than 24 hours after detection, and repair shall be completed as soon as possible but no later than 5 calendar days after detection. If repair of a defect cannot be completed within 5 calendar days, then the hazardous waste shall be removed from the container and the container shall not be used to manage hazardous waste until the defect is repaired.

(e) Container Level 3 standards.

(1) A container using Container Level 3 controls is one of the following:

(i) A container that is vented directly through a closed-vent system to a control device in accordance with the requirements of Subsection R315-264-1086(e)(2)(ii).

(ii) A container that is vented inside an enclosure which is exhausted through a closed-vent system to a control device in accordance with the requirements of Subsections R315-264-1086(e)(2)(i) and (e)(2)(ii).

(2) The owner or operator shall meet the following requirements, as applicable to the type of air emission control equipment selected by the owner or operator:

(i) The container enclosure shall be designed and operated in accordance with the criteria for a permanent total enclosure as specified in "Procedure T-Criteria for and Verification of a

Permanent or Temporary Total Enclosure" under 40 CFR 52.741, appendix B. The enclosure may have permanent or temporary openings to allow worker access; passage of containers through the enclosure by conveyor or other mechanical means; entry of permanent mechanical or electrical equipment; or direct airflow into the enclosure. The owner or operator shall perform the verification procedure for the enclosure as specified in Section 5.0 to "Procedure T-Criteria for and Verification of a Permanent or Temporary Total Enclosure" initially when the enclosure is first installed and, thereafter, annually.

(ii) The closed-vent system and control device shall be designed and operated in accordance with the requirements of Section R315-264-1087.

(3) Safety devices, as defined in 40 CFR 265.1081, which is adopted by reference, may be installed and operated as necessary on any container, enclosure, closed-vent system, or control device used to comply with the requirements of Subsection R315-264-1086(e)(1).

(4) Owners and operators using Container Level 3 controls in accordance with the provisions of Sections R315-264-1086 through 1090 shall inspect and monitor the closed-vent systems and control devices as specified in Subsection R315-264-1087.

(5) Owners and operators that use Container Level 3 controls in accordance with the provisions of Sections R315-264-1086 through 1090 shall prepare and maintain the records specified in Subsection R315-264-1089(d).

(6) Transfer of hazardous waste in or out of a container using Container Level 3 controls shall be conducted in such a manner as to minimize exposure of the hazardous waste to the atmosphere, to the extent practical, considering the physical properties of the hazardous waste and good engineering and safety practices for handling flammable, ignitable, explosive, reactive, or other hazardous materials. Examples of container loading procedures that the Director considers to meet the requirements of Subsection R315-264-1086(e) include using any one of the following: A submerged-fill pipe or other submerged-fill method to load liquids into the container; a vapor-balancing system or a vapor-recovery system to collect and control the vapors displaced from the container during filling operations; or a fitted opening in the top of a container through which the hazardous waste is filled and subsequently purging the transfer line before removing it from the container opening.

(f) For the purpose of compliance with Subsection R315-264-1086(c)(1)(i) or (d)(1)(i), containers shall be used that meet the applicable U.S. Department of Transportation (DOT) regulations on packaging hazardous materials for transportation as follows:

(1) The container meets the applicable requirements specified in 49 CFR part 178-Specifications for Packaging or 49 CFR part 179-Specifications for Tank Cars.

(2) Hazardous waste is managed in the container in accordance with the applicable requirements specified in 49 CFR part 107, subpart B-Exemptions; 49 CFR part 172-Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements; 49 CFR part 173-Shippers-General Requirements for Shipments and Packages; and 49 CFR part 180-Continuing Qualification and Maintenance of Packagings.

(3) For the purpose of complying with Sections R315-264-1086 through 1090, no exceptions to the 49 CFR part 178 or part 179 regulations are allowed except as provided for in Subsection R315-264-1086(f)(4).

(4) For a lab pack that is managed in accordance with the requirements of 49 CFR part 178 for the purpose of complying with Sections R315-264-1086 through 1090, an owner or operator may comply with the exceptions for combination packagings specified in 49 CFR 173.12(b).

(g) To determine compliance with the no detectable organic emissions requirement of Subsection R315-264-1086(d)(1)(ii), the procedure specified in Subsection R315-264-1083(d) shall be used.

(1) Each potential leak interface, i.e., a location where organic vapor leakage could occur, on the container, its cover, and associated closure devices, as applicable to the container, shall be checked. Potential leak interfaces that are associated with containers include, but are not limited to: The interface of the cover rim and the container wall; the periphery of any opening on the container or container cover and its associated closure device; and the sealing seat interface on a spring-loaded pressure-relief valve.

(2) The test shall be performed when the container is filled with a material having a volatile organic concentration representative of the range of volatile organic concentrations for the hazardous wastes expected to be managed in this type of container. During the test, the container cover and closure devices shall be secured in the closed position.

(h) Procedure for determining a container to be vapor-tight using Method 27 of 40 CFR part 60, appendix A for the purpose of complying with Subsection R315-264-1086(d)(1)(iii).

(1) The test shall be performed in accordance with Method 27 of 40 CFR part 60, appendix A of this chapter.

(2) A pressure measurement device shall be used that has a precision of +/- 2.5 mm water and that is capable of measuring above the pressure at which the container is to be tested for vapor tightness.

(3) If the test results determined by Method 27 indicate that the container sustains a pressure change less than or equal to 750 Pascals within 5 minutes after it is pressurized to a minimum of 4,500 Pascals, then the container is determined to be vapor-tight.

R315-264-1087. Standards: Closed-Vent Systems and Control Devices.

(a) Section R315-264-1087 applies to each closed-vent system and control device installed and operated by the owner or operator to control air emissions in accordance with standards of Sections R315-264-1080 through 1090.

(b) The closed-vent system shall meet the following requirements:

(1) The closed-vent system shall route the gases, vapors, and fumes emitted from the hazardous waste in the waste management unit to a control device that meets the requirements specified in Subsection R315-264-1087(c).

(2) The closed-vent system shall be designed and operated in accordance with the requirements specified in Subsection R315-264-1033(k).

(3) In the case when the closed-vent system includes bypass devices that could be used to divert the gas or vapor stream to the atmosphere before entering the control device, each bypass device shall be equipped with either a flow indicator as specified in Subsection R315-264-1087(b)(3)(i) or a seal or locking device as specified in Subsection R315-264-1087(b)(3)(ii). For the purpose of complying with Subsection R315-264-1087(b), low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, spring loaded pressure relief valves, and other fittings used for safety purposes are not considered to be bypass devices.

(i) If a flow indicator is used to comply with Subsection R315-264-1087(b)(3), the indicator shall be installed at the inlet to the bypass line used to divert gases and vapors from the closed-vent system to the atmosphere at a point upstream of the control device inlet. For Subsection R315-264-1087(b), a flow indicator means a device which indicates the presence of either gas or vapor flow in the bypass line.

(ii) If a seal or locking device is used to comply with Subsection R315-264-1087(b)(3), the device shall be placed on

the mechanism by which the bypass device position is controlled, e.g., valve handle, damper lever, when the bypass device is in the closed position such that the bypass device cannot be opened without breaking the seal or removing the lock. Examples of such devices include, but are not limited to, a car-seal or a lock-and-key configuration valve. The owner or operator shall visually inspect the seal or closure mechanism at least once every month to verify that the bypass mechanism is maintained in the closed position.

(4) The closed-vent system shall be inspected and monitored by the owner or operator in accordance with the procedure specified in Subsection R315-264-1033(l).

(c) The control device shall meet the following requirements:

(1) The control device shall be one of the following devices:

(i) A control device designed and operated to reduce the total organic content of the inlet vapor stream vented to the control device by at least 95 percent by weight;

(ii) An enclosed combustion device designed and operated in accordance with the requirements of Subsection R315-264-1033(c); or

(iii) A flare designed and operated in accordance with the requirements of Subsection R315-264-1033(d).

(2) The owner or operator who elects to use a closed-vent system and control device to comply with the requirements of Section R315-264-1087 shall comply with the requirements specified in Subsections R315-264-1087(c)(2)(i) through (c)(2)(vi).

(i) Periods of planned routine maintenance of the control device, during which the control device does not meet the specifications of Subsections R315-264-1087(c)(1)(i), (c)(1)(ii), or (c)(1)(iii), as applicable, shall not exceed 240 hours per year.

(ii) The specifications and requirements in Subsections R315-264-1087(c)(1)(i), (c)(1)(ii), and (c)(1)(iii) for control devices do not apply during periods of planned routine maintenance.

(iii) The specifications and requirements in Subsections R315-264-1087(c)(1)(i), (c)(1)(ii), and (c)(1)(iii) for control devices do not apply during a control device system malfunction.

(iv) The owner or operator shall demonstrate compliance with the requirements of Subsection R315-264-1087(c)(2)(i), i.e., planned routine maintenance of a control device, during which the control device does not meet the specifications of Subsections R315-264-1087(c)(1)(i), (c)(1)(ii), or (c)(1)(iii), as applicable, shall not exceed 240 hours per year, by recording the information specified in Subsection R315-264-1089(e)(1)(v).

(v) The owner or operator shall correct control device system malfunctions as soon as practicable after their occurrence in order to minimize excess emissions of air pollutants.

(vi) The owner or operator shall operate the closed-vent system such that gases, vapors, or fumes are not actively vented to the control device during periods of planned maintenance or control device system malfunction, i.e., periods when the control device is not operating or not operating normally, except in cases when it is necessary to vent the gases, vapors, and/or fumes to avoid an unsafe condition or to implement malfunction corrective actions or planned maintenance actions.

(3) The owner or operator using a carbon adsorption system to comply with Subsection R315-264-1087(c)(1) shall operate and maintain the control device in accordance with the following requirements:

(i) Following the initial startup of the control device, all activated carbon in the control device shall be replaced with fresh carbon on a regular basis in accordance with the requirements of Subsections R315-264-1033(g) or 1033(h).

(ii) All carbon that is a hazardous waste and that is

removed from the control device shall be managed in accordance with the requirements of Subsection R315-264-1033(n), regardless of the average volatile organic concentration of the carbon.

(4) An owner or operator using a control device other than a thermal vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system to comply with Subsection R315-264-1087(c)(1) shall operate and maintain the control device in accordance with the requirements of Subsection R315-264-1033(j).

(5) The owner or operator shall demonstrate that a control device achieves the performance requirements of Subsection R315-264-1087(c)(1) as follows:

(i) An owner or operator shall demonstrate using either a performance test as specified in Subsection R315-264-1087(c)(5)(iii) or a design analysis as specified in Subsection R315-264-1087(c)(5)(iv) the performance of each control device except for the following:

(A) A flare;

(B) A boiler or process heater with a design heat input capacity of 44 megawatts or greater;

(C) A boiler or process heater into which the vent stream is introduced with the primary fuel;

(D) A boiler or industrial furnace burning hazardous waste for which the owner or operator has been issued a final permit under Rule R315-270 and has designed and operates the unit in accordance with the requirements of Sections R315-266-100 through 112; or

(E) A boiler or industrial furnace burning hazardous waste for which the owner or operator has designed and operates in accordance with the interim status requirements of Sections R315-266-100 through 112.

(ii) An owner or operator shall demonstrate the performance of each flare in accordance with the requirements specified in Subsection R315-264-1033(e).

(iii) For a performance test conducted to meet the requirements of Subsection R315-264-1087(c)(5)(i), the owner or operator shall use the test methods and procedures specified in Subsections R315-264-1034(c)(1) through (c)(4).

(iv) For a design analysis conducted to meet the requirements of Subsection R315-264-1087(c)(5)(i), the design analysis shall meet the requirements specified in Subsection R315-264-1035(b)(4)(iii).

(v) The owner or operator shall demonstrate that a carbon adsorption system achieves the performance requirements of Subsection R315-264-1087(c)(1) based on the total quantity of organics vented to the atmosphere from all carbon adsorption system equipment that is used for organic adsorption, organic desorption or carbon regeneration, organic recovery, and carbon disposal.

(6) If the owner or operator and the Director do not agree on a demonstration of control device performance using a design analysis then the disagreement shall be resolved using the results of a performance test performed by the owner or operator in accordance with the requirements of Subsection R315-264-1087(c)(5)(iii). The Director may choose to have an authorized representative observe the performance test.

(7) The closed-vent system and control device shall be inspected and monitored by the owner or operator in accordance with the procedures specified in Subsections R315-264-1033(f)(2) and 1033(l). The readings from each monitoring device required by Subsection R315-264-1033(f)(2) shall be inspected at least once each operating day to check control device operation. Any necessary corrective measures shall be immediately implemented to ensure the control device is operated in compliance with the requirements of Section R315-264-1087.

R315-264-1088. Inspection and Monitoring Requirements.

(a) The owner or operator shall inspect and monitor air emission control equipment used to comply with Sections R315-264-1080 through 1090 in accordance with the applicable requirements specified in Sections R315-264-1084 through 1087.

(b) The owner or operator shall develop and implement a written plan and schedule to perform the inspections and monitoring required by Subsection R315-264-1088(a). The owner or operator shall incorporate this plan and schedule into the facility inspection plan required under Section R315-264-15.

R315-264-1089. Recordkeeping Requirements.

(a) Each owner or operator of a facility subject to requirements of Sections R315-264-1080 through 1090 shall record and maintain the information specified in Subsections R315-264-1089(b) through (j), as applicable to the facility. Except for air emission control equipment design documentation and information required by Subsections R315-264-1089(i) and (j), records required by Section R315-264-1089 shall be maintained in the operating record for a minimum of 3 years. Air emission control equipment design documentation shall be maintained in the operating record until the air emission control equipment is replaced or otherwise no longer in service. Information required by Subsections R315-264-1089(i) and (j) shall be maintained in the operating record for as long as the waste management unit is not using air emission controls specified in Sections R315-264-1084 through 1087 in accordance with the conditions specified in Subsection R315-264-1080(d) or 1080(b)(7), respectively.

(b) The owner or operator of a tank using air emission controls in accordance with the requirements of Section R315-264-1084 shall prepare and maintain records for the tank that include the following information:

(1) For each tank using air emission controls in accordance with the requirements of Subsection R315-264-1084, the owner or operator shall record:

(i) A tank identification number, or other unique identification description as selected by the owner or operator.

(ii) A record for each inspection required by Section R315-264-1084 that includes the following information:

(A) Date inspection was conducted.

(B) For each defect detected during the inspection: The location of the defect, a description of the defect, the date of detection, and corrective action taken to repair the defect. In the event that repair of the defect is delayed in accordance with the requirements of Section R315-264-1084, the owner or operator shall also record the reason for the delay and the date that completion of repair of the defect is expected.

(2) In addition to the information required by Subsection R315-264-1089(b)(1), the owner or operator shall record the following information, as applicable to the tank:

(i) The owner or operator using a fixed roof to comply with the Tank Level 1 control requirements specified in Subsection R315-264-1084(c) shall prepare and maintain records for each determination for the maximum organic vapor pressure of the hazardous waste in the tank performed in accordance with the requirements of Subsection R315-264-1084(c). The records shall include the date and time the samples were collected, the analysis method used, and the analysis results.

(ii) The owner or operator using an internal floating roof to comply with the Tank Level 2 control requirements specified in Subsection R315-264-1084(e) shall prepare and maintain documentation describing the floating roof design.

(iii) Owners and operators using an external floating roof to comply with the Tank Level 2 control requirements specified in Subsection R315-264-1084(f) shall prepare and maintain the following records:

(A) Documentation describing the floating roof design and the dimensions of the tank.

(B) Records for each seal gap inspection required by Subsection R315-264-1084(f)(3) describing the results of the seal gap measurements. The records shall include the date that the measurements were performed, the raw data obtained for the measurements, and the calculations of the total gap surface area. In the event that the seal gap measurements do not conform to the specifications in Subsection R315-264-1084(f)(1), the records shall include a description of the repairs that were made, the date the repairs were made, and the date the tank was emptied, if necessary.

(iv) Each owner or operator using an enclosure to comply with the Tank Level 2 control requirements specified in Subsection R315-264-1084(i) shall prepare and maintain the following records:

(A) Records for the most recent set of calculations and measurements performed by the owner or operator to verify that the enclosure meets the criteria of a permanent total enclosure as specified in "Procedure T---Criteria for and Verification of a Permanent or Temporary Total Enclosure" under 40 CFR 52.741, appendix B.

(B) Records required for the closed-vent system and control device in accordance with the requirements of Subsection R315-264-1089(e).

(c) The owner or operator of a surface impoundment using air emission controls in accordance with the requirements of Section R315-264-1085 shall prepare and maintain records for the surface impoundment that include the following information:

(1) A surface impoundment identification number, or other unique identification description as selected by the owner or operator.

(2) Documentation describing the floating membrane cover or cover design, as applicable to the surface impoundment, that includes information prepared by the owner or operator or provided by the cover manufacturer or vendor describing the cover design, and certification by the owner or operator that the cover meets the specifications listed in Subsection R315-264-1085(c).

(3) A record for each inspection required by Section R315-264-1085 that includes the following information:

(i) Date inspection was conducted.

(ii) For each defect detected during the inspection the following information: The location of the defect, a description of the defect, the date of detection, and corrective action taken to repair the defect. In the event that repair of the defect is delayed in accordance with the provisions of Subsection R315-264-1085(f), the owner or operator shall also record the reason for the delay and the date that completion of repair of the defect is expected.

(4) For a surface impoundment equipped with a cover and vented through a closed-vent system to a control device, the owner or operator shall prepare and maintain the records specified in Subsection R315-264-1089(e).

(d) The owner or operator of containers using Container Level 3 air emission controls in accordance with the requirements of Section R315-264-1086 shall prepare and maintain records that include the following information:

(1) Records for the most recent set of calculations and measurements performed by the owner or operator to verify that the enclosure meets the criteria of a permanent total enclosure as specified in "Procedure T-Criteria for and Verification of a Permanent or Temporary Total Enclosure" under 40 CFR 52.741, appendix B.

(2) Records required for the closed-vent system and control device in accordance with the requirements of Subsection R315-264-1089(e).

(e) The owner or operator using a closed-vent system and control device in accordance with the requirements of Section

R315-264-1087 shall prepare and maintain records that include the following information:

(1) Documentation for the closed-vent system and control device that includes:

(i) Certification that is signed and dated by the owner or operator stating that the control device is designed to operate at the performance level documented by a design analysis as specified in Subsection R315-264-1089(e)(1)(ii) or by performance tests as specified in Subsection R315-264-1089(e)(1)(iii) when the tank, surface impoundment, or container is or would be operating at capacity or the highest level reasonably expected to occur.

(ii) If a design analysis is used, then design documentation as specified in Subsection R315-264-1035(b)(4). The documentation shall include information prepared by the owner or operator or provided by the control device manufacturer or vendor that describes the control device design in accordance with Subsection R315-264-1035(b)(4)(iii) and certification by the owner or operator that the control equipment meets the applicable specifications.

(iii) If performance tests are used, then a performance test plan as specified in Subsection R315-264-1035(b)(3) and all test results.

(iv) Information as required by Subsection R315-264-1035(c)(1) and Subsection R315-264-1035(c)(2), as applicable.

(v) An owner or operator shall record, on a semiannual basis, the information specified in Subsections R315-264-1089(e)(1)(v)(A) and (e)(1)(v)(B) for those planned routine maintenance operations that would require the control device not to meet the requirements of Subsections R315-264-1087(c)(1)(i), (c)(1)(ii), or (c)(1)(iii), as applicable.

(A) A description of the planned routine maintenance that is anticipated to be performed for the control device during the next 6-month period. This description shall include the type of maintenance necessary, planned frequency of maintenance, and lengths of maintenance periods.

(B) A description of the planned routine maintenance that was performed for the control device during the previous 6-month period. This description shall include the type of maintenance performed and the total number of hours during those 6 months that the control device did not meet the requirements of Subsections R315-264-1087 (c)(1)(i), (c)(1)(ii), or (c)(1)(iii), as applicable, due to planned routine maintenance.

(vi) An owner or operator shall record the information specified in Subsections R315-264-1089(e)(1)(vi)(A) through (e)(1)(vi)(C) for those unexpected control device system malfunctions that would require the control device not to meet the requirements of Subsections R315-264-1087 (c)(1)(i), (c)(1)(ii), or (c)(1)(iii), as applicable.

(A) The occurrence and duration of each malfunction of the control device system.

(B) The duration of each period during a malfunction when gases, vapors, or fumes are vented from the waste management unit through the closed-vent system to the control device while the control device is not properly functioning.

(C) Actions taken during periods of malfunction to restore a malfunctioning control device to its normal or usual manner of operation.

(vii) Records of the management of carbon removed from a carbon adsorption system conducted in accordance with Subsection R315-264-1087(c)(3)(ii).

(f) The owner or operator of a tank, surface impoundment, or container exempted from standards in accordance with the provisions of Subsection R315-264-1082(c) shall prepare and maintain the following records, as applicable:

(1) For tanks, surface impoundments, and containers exempted under the hazardous waste organic concentration conditions specified in Subsections R315-264-1082(c)(1) or 1082(c)(2)(i) through (c)(2)(vi), the owner or operator shall

record the information used for each waste determination, e.g., test results, measurements, calculations, and other documentation, in the facility operating log. If analysis results for waste samples are used for the waste determination, then the owner or operator shall record the date, time, and location that each waste sample is collected in accordance with applicable requirements of Section R315-264-1083.

(2) For tanks, surface impoundments, or containers exempted under the provisions of Subsections R315-264-1082(c)(2)(vii) or (c)(2)(viii), the owner or operator shall record the identification number for the incinerator, boiler, or industrial furnace in which the hazardous waste is treated.

(g) An owner or operator designating a cover as "unsafe to inspect and monitor" pursuant to Subsections R315-264-1084(l) or 1085(g) shall record in a log that is kept in the facility operating record the following information: The identification numbers for waste management units with covers that are designated as "unsafe to inspect and monitor," the explanation for each cover stating why the cover is unsafe to inspect and monitor, and the plan and schedule for inspecting and monitoring each cover.

(h) The owner or operator of a facility that is subject to Section R315-264-1080 through 1090 and to the control device standards in 40 CFR part 60, subpart VV, or 40 CFR part 61, subpart V, may elect to demonstrate compliance with the applicable sections of Section R315-264-1080 through 1090 by documentation either pursuant to Section R315-264-1080 through 1090, or pursuant to the provisions of 40 CFR part 60, subpart VV or 40 CFR part 61, subpart V, to the extent that the documentation required by 40 CFR parts 60 or 61 duplicates the documentation required by Section R315-264-1089.

(i) For each tank or container not using air emission controls specified in Sections R315-264-1084 through 1087 in accordance with the conditions specified in Subsection R315-264-1080(d), the owner or operator shall record and maintain the following information:

(1) A list of the individual organic peroxide compounds manufactured at the facility that meet the conditions specified in Subsection R315-264-1080(d)(1).

(2) A description of how the hazardous waste containing the organic peroxide compounds identified in Subsection R315-264-1089(i)(1) are managed at the facility in tanks and containers. This description shall include:

(i) For the tanks used at the facility to manage this hazardous waste, sufficient information shall be provided to describe for each tank: A facility identification number for the tank; the purpose and placement of this tank in the management train of this hazardous waste; and the procedures used to ultimately dispose of the hazardous waste managed in the tanks.

(ii) For containers used at the facility to manage these hazardous wastes, sufficient information shall be provided to describe: A facility identification number for the container or group of containers; the purpose and placement of this container, or group of containers, in the management train of this hazardous waste; and the procedures used to ultimately dispose of the hazardous waste handled in the containers.

(3) An explanation of why managing the hazardous waste containing the organic peroxide compounds identified in Subsection R315-264-1089(i)(1) in the tanks and containers as described in Subsection R315-264-1089(i)(2) would create an undue safety hazard if the air emission controls, as required under Sections R315-264-1084 through 1087, are installed and operated on these waste management units. This explanation shall include the following information:

(i) For tanks used at the facility to manage these hazardous wastes, sufficient information shall be provided to explain: How use of the required air emission controls on the tanks would affect the tank design features and facility operating procedures currently used to prevent an undue safety hazard during the

management of this hazardous waste in the tanks; and why installation of safety devices on the required air emission controls, as allowed under Section R315-264-1080 through 1090, will not address those situations in which evacuation of tanks equipped with these air emission controls is necessary and consistent with good engineering and safety practices for handling organic peroxides.

(ii) For containers used at the facility to manage these hazardous wastes, sufficient information shall be provided to explain: How use of the required air emission controls on the containers would affect the container design features and handling procedures currently used to prevent an undue safety hazard during the management of this hazardous waste in the containers; and why installation of safety devices on the required air emission controls, as allowed under Section R315-264-1080 through 1090, will not address those situations in which evacuation of containers equipped with these air emission controls is necessary and consistent with good engineering and safety practices for handling organic peroxides.

(j) For each hazardous waste management unit not using air emission controls specified in Sections R315-264-1084 through 1087 in accordance with the requirements of Subsection R315-264-1080(b)(7), the owner and operator shall record and maintain the following information:

(1) Certification that the waste management unit is equipped with and operating air emission controls in accordance with the requirements of an applicable regulation codified under the Utah Air Conservation Act.

(2) Identification of the specific requirements codified under the Utah Air Conservation Act with which the waste management unit is in compliance.

R315-264-1090. Reporting Requirements.

(a) Each owner or operator managing hazardous waste in a tank, surface impoundment, or container exempted from using air emission controls under the provisions of Subsection R315-264-1082(c) shall report to the Director each occurrence when hazardous waste is placed in the waste management unit in noncompliance with the conditions specified in Subsection R315-264-1082(c)(1) or (c)(2), as applicable. Examples of such occurrences include placing in the waste management unit a hazardous waste having an average VO concentration equal to or greater than 500 ppmw at the point of waste origination; or placing in the waste management unit a treated hazardous waste of which the organic content has been reduced by an organic destruction or removal process that fails to achieve the applicable conditions specified in Subsections R315-264-1082(c)(2)(i) through (c)(2)(vi). The owner or operator shall submit a written report within 15 calendar days of the time that the owner or operator becomes aware of the occurrence. The written report shall contain the EPA identification number, facility name and address, a description of the noncompliance event and the cause, the dates of the noncompliance, and the actions taken to correct the noncompliance and prevent recurrence of the noncompliance. The report shall be signed and dated by an authorized representative of the owner or operator.

(b) Each owner or operator using air emission controls on a tank in accordance with the requirements Subsection R315-264-1084(c) shall report to the Director each occurrence when hazardous waste is managed in the tank in noncompliance with the conditions specified in Subsection R315-264-1084(b). The owner or operator shall submit a written report within 15 calendar days of the time that the owner or operator becomes aware of the occurrence. The written report shall contain the EPA identification number, facility name and address, a description of the noncompliance event and the cause, the dates of the noncompliance, and the actions taken to correct the noncompliance and prevent recurrence of the noncompliance.

The report shall be signed and dated by an authorized representative of the owner or operator.

(c) Each owner or operator using a control device in accordance with the requirements of Section R315-264-1087 shall submit a semiannual written report to the Director excepted as provided for in Subsection R315-264-1090(d). The report shall describe each occurrence during the previous 6-month period when either:

(1) A control device is operated continuously for 24 hours or longer in noncompliance with the applicable operating values defined in Subsection R315-264-1035(c)(4); or

(2) A flare is operated with visible emissions for 5 minutes or longer in a two-hour period, as defined in Subsection R315-264-1033(d). The written report shall include the EPA identification number, facility name and address, and an explanation why the control device could not be returned to compliance within 24 hours, and actions taken to correct the noncompliance. The report shall be signed and dated by an authorized representative of the owner or operator.

(d) A report to the Director in accordance with the requirements of Subsection R315-264-1090(c) is not required for a 6-month period during which all control devices subject to Section R316-264-1080 through 1090 are operated by the owner or operator such that:

(1) During no period of 24 hours or longer did a control device operate continuously in noncompliance with the applicable operating values defined in Subsection R315-264-1035(c)(4); and

(2) No flare was operated with visible emissions for 5 minutes or longer in a two-hour period, as defined in Subsection R315-264-1033(d).

R315-264-1100. Containment Buildings -- Applicability.

The requirements of Sections R315-264-1100 through 1102 apply to owners or operators who store or treat hazardous waste in units designed and operated under Section R315-264-1101. The owner or operator is not subject to the definition of land disposal in RCRA section 3004(k) provided that the unit:

(a) Is a completely enclosed, self-supporting structure that is designed and constructed of manmade materials of sufficient strength and thickness to support themselves, the waste contents, and any personnel and heavy equipment that operate within the unit, and to prevent failure due to pressure gradients, settlement, compression, or uplift, physical contact with the hazardous wastes to which they are exposed; climatic conditions; and the stresses of daily operation, including the movement of heavy equipment within the unit and contact of such equipment with containment walls;

(b) Has a primary barrier that is designed to be sufficiently durable to withstand the movement of personnel, wastes, and handling equipment within the unit;

(c) If the unit is used to manage liquids, has:

(1) A primary barrier designed and constructed of materials to prevent migration of hazardous constituents into the barrier;

(2) A liquid collection system designed and constructed of materials to minimize the accumulation of liquid on the primary barrier; and

(3) A secondary containment system designed and constructed of materials to prevent migration of hazardous constituents into the barrier, with a leak detection and liquid collection system capable of detecting, collecting, and removing leaks of hazardous constituents at the earliest practicable time, unless the unit has been granted a variance from the secondary containment system requirements under Subsection R315-264-1101(b)(4);

(d) Has controls sufficient to prevent fugitive dust emissions to meet the no visible emission standard in Subsection R315-264-1101(c)(1)(iv); and

(e) Is designed and operated to ensure containment and prevent the tracking of materials from the unit by personnel or equipment.

R315-264-1101. Containment Buildings -- Design and Operating Standards.

(a) All containment buildings shall comply with the following design standards:

(1) The containment building shall be completely enclosed with a floor, walls, and a roof to prevent exposure to the elements, e.g., precipitation, wind, run-on, and to assure containment of managed wastes.

(2) The floor and containment walls of the unit, including the secondary containment system if required under Subsection R315-264-1101(b), shall be designed and constructed of materials of sufficient strength and thickness to support themselves, the waste contents, and any personnel and heavy equipment that operate within the unit, and to prevent failure due to pressure gradients, settlement, compression, or uplift, physical contact with the hazardous wastes to which they are exposed; climatic conditions; and the stresses of daily operation, including the movement of heavy equipment within the unit and contact of such equipment with containment walls. The unit shall be designed so that it has sufficient structural strength to prevent collapse or other failure. All surfaces to be in contact with hazardous wastes shall be chemically compatible with those wastes. The Director shall consider standards established by professional organizations generally recognized by the industry such as the American Concrete Institute (ACI) and the American Society of Testing Materials (ASTM) in judging the structural integrity requirements of Subsection R315-264-1101(a). If appropriate to the nature of the waste management operation to take place in the unit, an exception to the structural strength requirement may be made for light-weight doors and windows that meet these criteria:

(i) They provide an effective barrier against fugitive dust emissions under Subsection R315-264-1101(c)(1)(iv); and

(ii) The unit is designed and operated in a fashion that assures that wastes will not actually come in contact with these openings.

(3) Incompatible hazardous wastes or treatment reagents shall not be placed in the unit or its secondary containment system if they could cause the unit or secondary containment system to leak, corrode, or otherwise fail.

(4) A containment building shall have a primary barrier designed to withstand the movement of personnel, waste, and handling equipment in the unit during the operating life of the unit and appropriate for the physical and chemical characteristics of the waste to be managed.

(b) For a containment building used to manage hazardous wastes containing free liquids or treated with free liquids, the presence of which is determined by the paint filter test, a visual examination, or other appropriate means, the owner or operator shall include:

(1) A primary barrier designed and constructed of materials to prevent the migration of hazardous constituents into the barrier, e.g., a geomembrane covered by a concrete wear surface.

(2) A liquid collection and removal system to minimize the accumulation of liquid on the primary barrier of the containment building:

(i) The primary barrier shall be sloped to drain liquids to the associated collection system; and

(ii) Liquids and waste shall be collected and removed to minimize hydraulic head on the containment system at the earliest practicable time.

(3) A secondary containment system including a secondary barrier designed and constructed to prevent migration of hazardous constituents into the barrier, and a leak detection

system that is capable of detecting failure of the primary barrier and collecting accumulated hazardous wastes and liquids at the earliest practicable time.

(i) The requirements of the leak detection component of the secondary containment system are satisfied by installation of a system that is, at a minimum:

(A) Constructed with a bottom slope of 1 percent or more; and

(B) Constructed of a granular drainage material with a hydraulic conductivity of 1×10^{-2} cm/sec or more and a thickness of 30.5 cm (12 inches) or more, or constructed of synthetic or geonet drainage materials with a transmissivity of 3×10^{-5} m²/sec or more.

(ii) If treatment is to be conducted in the building, an area in which such treatment will be conducted shall be designed to prevent the release of liquids, wet materials, or liquid aerosols to other portions of the building.

(iii) The secondary containment system shall be constructed of materials that are chemically resistant to the waste and liquids managed in the containment building and of sufficient strength and thickness to prevent collapse under the pressure exerted by overlaying materials and by any equipment used in the containment building. Containment buildings can serve as secondary containment systems for tanks placed within the building under certain conditions. A containment building can serve as an external liner system for a tank, provided it meets the requirements of Subsection R315-264-193(e)(1). In addition, the containment building shall meet the requirements of Subsections R315-264-193(b) and 193(c)(1) and (2) to be considered an acceptable secondary containment system for a tank.

(4) For existing units other than 90-day generator units, the Director may delay the secondary containment requirement for up to two years, based on a demonstration by the owner or operator that the unit substantially meets the standards of Sections R315-264-1100 and 1102. In making this demonstration, the owner or operator shall:

(i) Provide written notice to the Director of their request by November 16, 1992. This notification shall describe the unit and its operating practices with specific reference to the performance of existing containment systems, and specific plans for retrofitting the unit with secondary containment;

(ii) Respond to any comments from the Director on these plans within 30 days; and

(iii) Fulfill the terms of the revised plans, if such plans are approved by the Director.

(c) Owners or operators of all containment buildings shall:

(1) Use controls and practices to ensure containment of the hazardous waste within the unit; and, at a minimum:

(i) Maintain the primary barrier to be free of significant cracks, gaps, corrosion, or other deterioration that could cause hazardous waste to be released from the primary barrier;

(ii) Maintain the level of the stored/treated hazardous waste within the containment walls of the unit so that the height of any containment wall is not exceeded;

(iii) Take measures to prevent the tracking of hazardous waste out of the unit by personnel or by equipment used in handling the waste. An area shall be designated to decontaminate equipment and any rinsate shall be collected and properly managed; and

(iv) Take measures to control fugitive dust emissions such that any openings, doors, windows, vents, cracks, etc., exhibit no visible emissions, see 40 CFR part 60, appendix A, Method 22-Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares. In addition, all associated particulate collection devices, e.g., fabric filter, electrostatic precipitator, shall be operated and maintained with sound air pollution control practices, see 40 CFR part 60 subpart 292 for guidance. This state of no visible emissions

shall be maintained effectively at all times during routine operating and maintenance conditions, including when vehicles and personnel are entering and exiting the unit.

(2) Obtain and keep on-site a certification by a qualified Professional Engineer that the containment building design meets the requirements of Subsections R315-264-1101(a), (b), and (c).

(3) Throughout the active life of the containment building, if the owner or operator detects a condition that could lead to or has caused a release of hazardous waste, the owner or operator shall repair the condition promptly, in accordance with the following procedures.

(i) Upon detection of a condition that has led to a release of hazardous waste, e.g., upon detection of leakage from the primary barrier, the owner or operator shall:

(A) Enter a record of the discovery in the facility operating record;

(B) Immediately remove the portion of the containment building affected by the condition from service;

(C) Determine what steps shall be taken to repair the containment building, remove any leakage from the secondary collection system, and establish a schedule for accomplishing the cleanup and repairs; and

(D) Within 7 days after the discovery of the condition, notify the Director of the condition, and within 14 working days, provide a written notice to the Director with a description of the steps taken to repair the containment building, and the schedule for accomplishing the work.

(ii) The Director shall review the information submitted, make a determination regarding whether the containment building shall be removed from service completely or partially until repairs and cleanup are complete, and notify the owner or operator of the determination and the underlying rationale in writing.

(iii) Upon completing all repairs and cleanup the owner or operator shall notify the Director in writing and provide a verification, signed by a qualified, registered professional engineer, that the repairs and cleanup have been completed according to the written plan submitted in accordance with Subsection R315-264-1101(c)(3)(i)(D).

(4) Inspect and record in the facility operating record, at least once every seven days, data gathered from monitoring and leak detection equipment as well as the containment building and the area immediately surrounding the containment building to detect signs of releases of hazardous waste.

(d) For a containment building that contains both areas with and without secondary containment, the owner or operator shall:

(1) Design and operate each area in accordance with the requirements enumerated in Subsections R315-264-1101(a) through (c);

(2) Take measures to prevent the release of liquids or wet materials into areas without secondary containment; and

(3) Maintain in the facility's operating log a written description of the operating procedures used to maintain the integrity of areas without secondary containment.

(e) Notwithstanding any other provision of Subsection R315-264-1100 through 1102 the Director may waive requirements for secondary containment for a permitted containment building where the owner operator demonstrates that the only free liquids in the unit are limited amounts of dust suppression liquids required to meet occupational health and safety requirements, and where containment of managed wastes and liquids can be assured without a secondary containment system.

R315-264-1102. Closure and Post-Closure Care.

(a) At closure of a containment building, the owner or operator shall remove or decontaminate all waste residues,

contaminated containment system components, liners, etc.; contaminated subsoils; and structures and equipment contaminated with waste and leachate; and manage them as hazardous waste unless Subsection R315-261-3(d) applies. The closure plan, closure activities, cost estimates for closure, and financial responsibility for containment buildings shall meet all of the requirements specified in Sections R315-264-110 through 120 and 140 through 151.

(b) If, after removing or decontaminating all residues and making all reasonable efforts to effect removal or decontamination of contaminated components, subsoils, structures, and equipment as required in Subsection R315-264-1102(a), the owner or operator finds that not all contaminated subsoils can be practicably removed or decontaminated, he shall close the facility and perform post-closure care in accordance with the closure and post-closure requirements that apply to landfills, Section R315-264-310. In addition, for the purposes of closure, post-closure, and financial responsibility, such a containment building is then considered to be a landfill, and the owner or operator shall meet all of the requirements for landfills specified in Sections R315-264-110 through 120 and 140 through 151.

R315-264-1103. Appendix I to Rule R315-264 -- Recordkeeping Instructions.

The recordkeeping provisions of Section R315-264-73 specify that an owner or operator shall keep a written operating record at his facility. This appendix provides additional instructions for keeping portions of the operating record. See Subsection R315-264-73(b) for additional recordkeeping requirements.

The following information shall be recorded, as it becomes available, and maintained in the operating record until closure of the facility in the following manner:

Records of each hazardous waste received, treated, stored, or disposed of at the facility which include the following:

(1) A description by its common name and the EPA Hazardous Waste Number(s) from Rule R315-261 which apply to the waste. The waste description also shall include the waste's physical form, i.e., liquid, sludge, solid, or contained gas. If the waste is not listed in Sections R315-261-30 through 35, the description also shall include the process that produced it, for example, solid filter cake from production of ----, EPA Hazardous Waste Number W051.

Each hazardous waste listed in Sections R315-261-30 through 35, and each hazardous waste characteristic defined in Sections R315-261-20 through 24, has a four-digit EPA Hazardous Waste Number assigned to it. This number shall be used for recordkeeping and reporting purposes. Where a hazardous waste contains more than one listed hazardous waste, or where more than one hazardous waste characteristic applies to the waste, the waste description shall include all applicable EPA Hazardous Waste Numbers.

(2) The estimated or manifest-reported weight, or volume and density, where applicable, in one of the units of measure specified in Table 1;

Table 1

Unit of measure	Code(1)
Gallons	G
Gallons per Hour	E
Gallons per Day	U
Liters	L
Liters per Hour	H
Liters per Day	V
Short Tons per Hour	D
Metric Tons per Hour	W
Short Tons per Day	N
Metric Tons per Day	S
Pounds per Hour	J
Kilograms per Hour	R

Cubic Yards	Y
Cubic Meters	C
Acres	B
Acre-feet	A
Hectares	Q
Hectare-meter	F
Btu's per Hour	I
Pounds	P
Short tons	T
Kilograms	K
Tons	M

(1) Single digit symbols are used here for data processing purposes.

(3) The method(s), by handling code(s) as specified in Table 2, and date(s) of treatment, storage, or disposal.

Table 2
Handling Codes for Treatment, Storage and Disposal Methods

Enter the handling code(s) listed below that most closely represents the technique(s) used at the facility to treat, store or dispose of each quantity of hazardous waste received.

For Storage

Code	Storage type
S01	Container (barrel, drum, etc.)
S02	Tank
S03	Waste Pile
S04	Surface Impoundment
S05	Drip Pad
S06	Containment Building (Storage)
S99	Other Storage (specify)

For Treatment

(a) Thermal Treatment-

Code	Type of Thermal Treatment
T06	Liquid injection incinerator
T07	Rotary kiln incinerator
T08	Fluidized bed incinerator
T09	Multiple hearth incinerator
T10	Infrared furnace incinerator
T11	Molten salt destructor
T12	Pyrolysis
T13	Wet air oxidation
T14	Calcination
T15	Microwave discharge
T18	Other (specify)

(b) Chemical Treatment-

Code	Type of Chemical Treatment
T19	Absorption mound
T20	Absorption field
T21	Chemical fixation
T22	Chemical oxidation
T23	Chemical precipitation
T24	Chemical reduction
T25	Chlorination
T26	Chlorinolysis
T27	Cyanide destruction
T28	Degradation
T29	Detoxification
T30	Ion exchange
T31	Neutralization
T32	Ozonation
T33	Photolysis
T34	Other (specify)

(c) Physical Treatment-

(1) Separation of components:

Code	Type of Separation treatment
T35	Centrifugation
T36	Clarification
T37	Coagulation
T38	Decanting
T39	Encapsulation
T40	Filtration
T41	Flocculation
T42	Flotation
T43	Foaming
T44	Sedimentation
T45	Thickening
T46	Ultrafiltration
T47	Other (specify)

(2) Removal of Specific Components:

Code	Type of Removal Treatment
------	---------------------------

- T48 Absorption-molecular sieve
- T49 Activated carbon
- T50 Blending
- T51 Catalysis
- T52 Crystallization
- T53 Dialysis
- T54 Distillation
- T55 Electrodialysis
- T56 Electrolysis
- T57 Evaporation
- T58 High gradient magnetic separation
- T59 Leaching
- T60 Liquid ion exchange
- T61 Liquid-liquid extraction
- T62 Reverse osmosis
- T63 Solvent recovery
- T64 Stripping
- T65 Sand filter
- T66 Other (specify)

(d) Biological Treatment

- | | |
|------|------------------------------|
| Code | Type of Biological Treatment |
| T67 | Activated sludge |
| T68 | Aerobic lagoon |
| T69 | Aerobic tank |
| T70 | Anaerobic tank |
| T71 | Composting |
| T72 | Septic tank |
| T73 | Spray irrigation |
| T74 | Thickening filter |
| T75 | Trickling filter |
| T76 | Waste stabilization pond |
| T77 | Other (specify) |

(e) Boilers and Industrial Furnaces

- | | |
|------|--|
| Code | Type of Boiler or Industrial Furnace |
| T80 | Boiler |
| T81 | Cement Kiln |
| T82 | Lime Kiln |
| T83 | Aggregate Kiln |
| T84 | Phosphate Kiln |
| T85 | Coke Oven |
| T86 | Blast Furnace |
| T87 | Smelting, Melting, or Refining Furnace |
| T88 | Titanium Dioxide Chloride Process Oxidation Reactor |
| T89 | Methane Reforming Furnace |
| T90 | Pulping Liquor Recovery Furnace |
| T91 | Combustion Device Used in the Recovery of Sulfur Values from Spent Sulfuric Acid |
| T92 | Halogen Acid Furnaces |
| T93 | Other Industrial Furnaces Listed in Section R315-260.10 (specify) |

(f) Other Treatment

- | | |
|------|----------------------------------|
| Code | Other type of Treatment |
| T94 | Containment Building (Treatment) |

For Disposal

- | | |
|------|--|
| Code | Type of Disposal |
| D79 | Underground Injection |
| D80 | Landfill |
| D81 | Land Treatment |
| D82 | Ocean Disposal |
| D83 | Surface Impoundment (to be closed as a landfill) |
| D99 | Other Disposal (specify) |

For Miscellaneous Sections R315-264-600 through 603 Units

- | | |
|------|---|
| Code | Unit type |
| X01 | Open Burning/Open Detonation |
| X02 | Mechanical Processing |
| X03 | Thermal Unit |
| X04 | Geologic Repository |
| X99 | Other Sections R315-264-600 through 603 Units (specify) |

R315-264-1104. Appendix IV to Rule R315-264-Cochran's Approximation to the Behrens-Fisher Students' t-test.

40 CFR 264 Appendix IV, 2015 edition, is adopted and incorporated by reference.

R315-264-1105. Appendix V to Rule R315-264 -- Examples of Potentially Incompatible Waste.

Many hazardous wastes, when mixed with other waste or materials at a hazardous waste facility, can produce effects which are harmful to human health and the environment, such as (1) heat or pressure, (2) fire or explosion, (3) violent reaction, (4) toxic dusts, mists, fumes, or gases, or (5) flammable fumes

or gases.

Below are examples of potentially incompatible wastes, waste components, and materials, along with the harmful consequences which result from mixing materials in one group with materials in another group. The list is intended as a guide to owners or operators of treatment, storage, and disposal facilities, and to enforcement and permit granting officials, to indicate the need for special precautions when managing these potentially incompatible waste materials or components.

This list is not intended to be exhaustive. An owner or operator shall, as the regulations require, adequately analyze his wastes so that he can avoid creating uncontrolled substances or reactions of the type listed below, whether they are listed below or not.

It is possible for potentially incompatible wastes to be mixed in a way that precludes a reaction, e.g., adding acid to water rather than water to acid, or that neutralizes them, e.g., a strong acid mixed with a strong base, or that controls substances produced, e.g., by generating flammable gases in a closed tank equipped so that ignition cannot occur, and burning the gases in an incinerator.

In the lists below, the mixing of a Group A material with a Group B material may have the potential consequence as noted.

Table

Group 1-A

- Acetylene sludge
- Alkaline caustic liquids
- Alkaline cleaner
- Alkaline corrosive liquids
- Alkaline corrosive battery fluid
- Caustic wastewater
- Lime sludge and other corrosive alkalies
- Lime wastewater
- Lime and water
- Spent caustic

Group 1-B

- Acid sludge
- Acid and water
- Battery acid
- Chemical cleaners
- Electrolyte, acid
- Etching acid liquid or solvent
- Pickling liquor and other corrosive acids
- Spent acid
- Spent mixed acid
- Spent sulfuric acid
- Potential consequences: Heat generation; violent reaction.

Group 2-A

- Aluminum
- Beryllium
- Calcium
- Lithium
- Magnesium
- Potassium
- Sodium
- Zinc powder
- Other reactive metals and metal hydrides

Group 2-B

- Any waste in Group 1-A or 1-B
- Potential consequences: Fire or explosion; generation of flammable hydrogen gas.

Group 3-A

- Alcohols
- Water

Group 3-B

- Any concentrated waste in Groups 1-A or 1-B
- Calcium
- Lithium

Metal hydrides
Potassium
SO2 Cl2, SOCl2, POCl3, CH3 SiCl3
Other water-reactive waste
Potential consequences: Fire, explosion, or heat generation;
generation of flammable or toxic gases.

Group 4-A

Alcohols
Aldehydes
Halogenated hydrocarbons
Nitratated hydrocarbons
Unsaturated hydrocarbons
Other reactive organic compounds and solvents

Group 4-B

Concentrated Group 1-A or 1-B wastes
Group 2-A wastes
Potential consequences: Fire, explosion, or violent reaction.

Group 5-A

Spent cyanide and sulfide solutions

Group 5-B

Group 1-B wastes
Potential consequences: Generation of toxic hydrogen cyanide or
hydrogen sulfide gas.

Group 6-A

Chlorates
Chlorine
Chlorites
Chromic acid
Hypochlorites
Nitrates
Nitric acid, fuming
Perchlorates
Permanganates
Peroxides
Other strong oxidizers

Group 6-B

Acetic acid and other organic acids
Concentrated mineral acids
Group 2-A wastes
Group 4-A wastes
Other flammable and combustible wastes
Potential consequences: Fire, explosion, or violent reaction.
Source: "Law, Regulations, and Guidelines for Handling of Hazardous
Waste." California Department of Health, February 1975.

(1) These include counties, city-county consolidations, and
independent cities. In the case of Alaska, the political
jurisdictions are election districts, and, in the case of Hawaii,
the political jurisdiction listed is the island of Hawaii.

**R315-264-1106. Appendix VI to Rule R315-264 -- Political
Jurisdictions within Utah in Which Compliance With
Subsection R315-264-18(a) Shall Be Demonstrated.**

- Beaver
- Box Elder
- Cache
- Carbon
- Daggett
- Davis
- Duchesne
- Emery
- Garfield
- Grand
- Iron
- Juab
- Kane
- Millard
- Morgan
- Piute
- Rich
- Salt Lake

- San Juan
- Sanpete
- Sevier
- Summit
- Tooele
- Uintah
- Utah
- Wasatch
- Washington
- Wayne
- Weber

**R315-264-1107. Appendix IX to Rule R315-264 -- Ground-
Water Monitoring List.**

40 CFR 264 Appendix IX, 2015 edition, is adopted and
incorporated by reference.

**KEY: hazardous waste, TSD facilities
August 31, 2017**

**19-6-105
19-6-106**

R315. Environmental Quality, Waste Management and Radiation Control, Waste Management.**R315-265. Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities.****R315-265-1. Incorporation.**

40 CFR 265, 2015 edition, as amended by 81 FR 85827, is adopted and incorporated by reference with the following exceptions:

(a) Substitute "Director" for all references to "Regional Administrator."

(b) Substitute "Director" or "Board" for EPA as appropriate except for references to "EPA identification number and where EPA is used in reference to actions under 40 CFR 268.42(b) and in 265.71(a)(3);

(c) Substitute "Utah Division of Waste Management and Radiation Control " or "Director" as appropriate for "Environmental Protection Agency;" and

(d) The language that reads "If the facilities covered by the mechanism are in more than one Region, identical evidence of financial assurance must be submitted to and maintained with the Regional Administrators of all such Regions" in 40 CFR 265.143(g) and 256.145(g) is changed to read as follows: If the facilities covered by the mechanism are in more than one State, identical evidence of financial assurance must be submitted to the Director as is submitted to all other states and to all appropriate EPA Regional Administrators.

(e) Add, following December 6, 1990, in 40 CFR 265.440(a), "for all HSWA drip pads or January 31, 1992 for all non-HSWA drip pads."

(f) Add, following December 24, 1992, in 40 CFR 265-440(a), "for all HSWA drip pads or July 30, 1993 for all non-HSWA drip pads."

KEY: hazardous waste, TSD facilities, interim status**August 31, 2017****19-6-105****19-6-106**

R315. Environmental Quality, Waste Management and Radiation Control, Waste Management.**R315-266. Standards for the Management of Specific Hazardous Wastes and Specific Types of Hazardous Waste Management Facilities.****R315-266-20. Recyclable Materials Used in a Manner Constituting Disposal -- Applicability.**

(a) The regulations of Sections R315-266-20 through 23 apply to recyclable materials that are applied to or placed on the land:

- (1) Without mixing with any other substance(s); or
- (2) After mixing or combination with any other substance(s). These materials shall be referred to throughout Sections R315-266-20 through 23 as "materials used in a manner that constitutes disposal."

(b) Products produced for the general public's use that are used in a manner that constitutes disposal and that contain recyclable materials are not presently subject to regulation if the recyclable materials have undergone a chemical reaction in the course of producing the products so as to become inseparable by physical means and if such products meet the applicable treatment standards in Sections R315-268-40 through 49, or applicable prohibition levels in Section R315-268-32 or RCRA section 3004(d), where no treatment standards have been established, for each recyclable material, i.e., hazardous waste, that they contain, and the recycler complies with Subsection R315-268-7(b)(6).

(c) Anti-skid/deicing uses of slags, which are generated from high temperature metals recovery (HTMR) processing of hazardous waste K061, K062, and F006, in a manner constituting disposal are not covered by the exemption in Subsection R315-266-20(b) and remain subject to regulation.

(d) Fertilizers that contain recyclable materials are not subject to regulation provided that:

- (1) They are zinc fertilizers excluded from the definition of solid waste according to Subsection R315-261-4(a)(21); or
- (2) They meet the applicable treatment standards in Sections R315-268-40 through 49 for each hazardous waste that they contain.

R315-266-21. Recyclable Materials Used in a Manner Constituting Disposal -- Standards Applicable to Generators and Transporters of Materials Used in a Manner That Constitutes Disposal.

Generators and transporters of materials that are used in a manner that constitutes disposal are subject to the applicable requirements of Rules R315-262 and 263, and the notification requirement under section 3010 of RCRA.

R315-266-22. Recyclable Materials Used in a Manner Constituting Disposal -- Standards Applicable to Stors of Materials That Are to Be Used in a Manner That Constitutes Disposal Who Are Not the Ultimate Users.

Owners or operators of facilities that store recyclable materials that are to be used in a manner that constitutes disposal, but who are not the ultimate users of the materials, are regulated under all applicable provisions of Sections R315-264-1 through 259; 40 CFR 265.1 through 260, which are adopted by reference; and Rules R315-270 and 124 and the notification requirement under section 3010 of RCRA.

R315-266-23. Recyclable Materials Used in a Manner Constituting Disposal -- Standards Applicable to Users of Materials That Are Used in a Manner That Constitutes Disposal.

(a) Owners or operators of facilities that use recyclable materials in a manner that constitutes disposal are regulated under all applicable provisions of Rules R315-124, 264, 265, 268, and 270 and the notification requirement under section

3010 of RCRA. These requirements do not apply to products which contain these recyclable materials under the provisions of Subsection R315-266-20(b).

(b) The use of waste or used oil or other material, which is contaminated with dioxin or any other hazardous waste, other than a waste identified solely on the basis of ignitability, for dust suppression or road treatment is prohibited.

R315-266-70. Recyclable Materials Utilized for Precious Metal Recovery -- Applicability and Requirements.

(a) The regulations of Section R315-266-70 apply to recyclable materials that are reclaimed to recover economically significant amounts of gold, silver, platinum, palladium, iridium, osmium, rhodium, ruthenium, or any combination of these.

(b) Persons who generate, transport, or store recyclable materials that are regulated under Section R315-266-70 are subject to the following requirements:

(1) Notification requirements under section 3010 of RCRA;

(2) Sections R315-262-20 through 27, for generators; Sections R315-263-20 and 21, for transporters; and 40 CFR 265.71 and 72, which are adopted by reference, for persons who store; and

(3) For precious metals exported to or imported from designated OECD member countries for recovery, Sections R315-262-80 through 89 and 40 CFR 265.12(a)(2), which is adopted by reference. For precious metals exported to or imported from non-OECD countries for recovery, Sections R315-262-50 through 58 and 60.

(c) Persons who store recycled materials that are regulated under Section R315-266-70 shall keep the following records to document that they are not accumulating these materials speculatively, as defined in Subsection R315-261-1(c);

(1) Records showing the volume of these materials stored at the beginning of the calendar year;

(2) The amount of these materials generated or received during the calendar year; and

(3) The amount of materials remaining at the end of the calendar year.

(d) Recyclable materials that are regulated under Section R315-266-70 that are accumulated speculatively, as defined in Subsection R315-261-1(c), are subject to all applicable provisions of Rules R315-262 through 265, 270, and 124.

R315-266-80. Spent Lead-Acid Batteries Being Reclaimed -- Applicability and Requirements.

(a) Are spent lead-acid batteries exempt from hazardous waste management requirements? If you generate, collect, transport, store, or regenerate lead-acid batteries for reclamation purposes, you may be exempt from certain hazardous waste management requirements. Use Subsections R315-266-80(a)(1) through (7) to determine which requirements apply to you. Alternatively, you may choose to manage your spent lead-acid batteries under the "Universal Waste" rule in Rule R315-273.

(1) If your batteries will be reclaimed through regeneration, such as by electrolyte replacement, then you are exempt from Rules R315-262, except for Section R315-262-11; 263; 264; 265; 266; 268; 270; and 124, and the notification requirements at section 3010 of RCRA and you are subject to Rule R315-261 and Section R315-262-11.

(2) If your batteries will be reclaimed other than through regeneration and if you generate, collect, and/or transport these batteries then you are exempt from Rule R315-262, except for Section R315-262-11; 263; 264; 265; 266; 270; and 124, and the notification requirements at section 3010 of RCRA and you are subject to Rule R315-261 and Section R315-262-11, and applicable provisions under Rule R315-268.

(3) If your batteries will be reclaimed other than through

regeneration and if you store these batteries but you aren't the reclaimer then you are exempt from Rule R315-262, except for Section R315-262-11; 263; 264; 265; 266; 270; and 124, and the notification requirements at section 3010 of RCRA and you are subject to Rule R315-261 and Section R315-262-11, and applicable provisions under Rule R315-268.

(4) If your batteries will be reclaimed other than through regeneration and if you store these batteries before you reclaim them then you shall comply with Subsection R315-266-80(b) and as appropriate other regulatory provisions described in Subsection R315-266-80(b) and you are subject to Rule R315-261 and Section R315-262-11, and applicable provisions under Rule R315-268.

(5) If your batteries will be reclaimed other than through regeneration and if you don't store these batteries before you reclaim them then you are exempt from Rule R315-262, except for Section R315-262-11; 263; 264; 265; 266; 270; and 124, and the notification requirements at section 3010 of RCRA and you are subject to Rule R315-261 and Section R315-262-11, and applicable provisions under Rule R315-268.

(6) If your batteries will be reclaimed through regeneration or any other means and if you export these batteries for reclamation in a foreign country then you are exempt from Rules R315-262 (except for Sections R315-262-11, R315-262-18, and R315-262-80 through R315-262-84) R315-263, R315-264, R315-265, R315-266, R315-268, R315-270, R315-124, and the notification requirements at section 3010 of RCRA and you are subject to Rule R315-261, Sections R315-262-11 and R315-262-18, and Sections R315-262-80 through R315-262-84.

(7) If your batteries will be reclaimed through regeneration or any other means and if you transport these batteries in the U.S. to export them for reclamation in a foreign country then you are exempt from Rules R315-263, 264, 265, 266, 268, 270, 124, and the notification requirements at section 3010 of RCRA and you shall comply with applicable requirements in Sections R315-262-80 through R315-262-84, if shipping to one of the OECD countries specified in Subsection R315-262-58(a)(1), or shall comply with the following:

(i) you may not accept a shipment if you know the shipment does not conform to the EPA Acknowledgment of Consent;

(ii) you shall ensure that a copy of the EPA Acknowledgment of Consent accompanies the shipment; and

(iii) you shall ensure that the shipment is delivered to the facility designated by the person initiating the shipment.

(b) If I store spent lead-acid batteries before I reclaim them but not through regeneration, which requirements apply? The requirements of Subsection R315-266-80(b) apply to you if you store spent lead-acid batteries before you reclaim them, but you don't reclaim them through regeneration. The requirements are slightly different depending on your permit status.

(1) For Interim Status Facilities, you shall comply with:

(i) Notification requirements under section 3010 of RCRA.

(ii) All applicable provisions in 40 CFR 265.1 through 265.4, which are adopted by reference in Section R315-265-1.

(iii) All applicable provisions in 40 CFR 265.10 through 265.19, which are adopted by reference in Section R315-265-1, except Section 265.13, waste analysis.

(iv) All applicable provisions in 40 CFR 265.30 through 265.56, which are adopted by reference in Section R315-265-1.

(v) All applicable provisions in 40 CFR 265.70 through 77, which are adopted by reference, except 265.71 and 265.72, dealing with the use of the manifest and manifest discrepancies.

(vi) All applicable provisions in 40 CFR 265.90 through 265.260, which are adopted by reference in Section R315-265-1.

(vii) All applicable provisions in Rules R315-270 and 124.

(2) For Permitted Facilities:

(i) Notification requirements under section 3010 of RCRA.

(ii) All applicable provisions in Sections R315-264-1 through 4.

(iii) All applicable provisions in Sections R315-264-10 through 19, but not Section R315-264-13, waste analysis.

(iv) All applicable provisions in Sections R315-264-30 through 56.

(v) All applicable provisions in Sections R315-264-70 through 77, but not Sections R315-264-71 or 72, dealing with the use of the manifest and manifest discrepancies.

(vi) All applicable provisions in Sections R315-264-90 through 259.

(vii) All applicable provisions in Rules R315-270 and 124.

R315-266-100. Hazardous Waste Burned in Boilers and Industrial Furnaces -- Applicability.

(a) The regulations of Sections R315-266-100 through 112 apply to hazardous waste burned or processed in a boiler or industrial furnace, as defined in Section R315-260-10, irrespective of the purpose of burning or processing, except as provided by Subsections R315-266-100(b), (c), (d), (g), and (h). In Sections R315-266-100 through 112, the term "burn" means burning for energy recovery or destruction, or processing for materials recovery or as an ingredient. The emissions standards of Subsections R315-266-104, 105 through 107 apply to facilities operating under interim status or under a RCRA permit as specified in Subsections R315-266-102 and 103.

(b) Integration of the MACT standards.

(1) Except as provided by Subsections R315-266-100(b)(2), (b)(3), and (b)(4), the standards of Rule R315-266 do not apply to a new hazardous waste boiler or industrial furnace unit that becomes subject to RCRA permit requirements after October 12, 2005; or no longer apply when an owner or operator of an existing hazardous waste boiler or industrial furnace unit demonstrates compliance with the maximum achievable control technology (MACT) requirements of Subsection R307-214-2(39), which incorporates 40 CFR 63, subpart EEE, by conducting a comprehensive performance test and submitting to the Director a Notification of Compliance under 40 CFR 63.1207(j) and 63.1210(d), which are incorporated by Subsection R307-214-2(29), documenting compliance with the requirements of Subsection R307-214-2(29), which incorporates 40 CFR 63, subpart EEE. Nevertheless, even after this demonstration of compliance with the MACT standards, RCRA permit conditions that were based on the standards of Rule R315-266 shall continue to be in effect until they are removed from the permit or the permit is terminated or revoked, unless the permit expressly provides otherwise.

(2) The following standards continue to apply:

(i) If you elect to comply with Subsection R315-270-235(a)(1)(i) to minimize emissions of toxic compounds from startup, shutdown, and malfunction events, Subsection R315-266-102(e)(1) requiring operations in accordance with the operating requirements specified in the permit at all times that hazardous waste is in the unit, and Subsection R315-266-102(e)(2)(iii) requiring compliance with the emission standards and operating requirements during startup and shutdown if hazardous waste is in the combustion chamber, except for particular hazardous wastes. These provisions apply only during startup, shutdown, and malfunction events;

(ii) The closure requirements of Subsections R315-266-102(e)(11) and 103(l);

(iii) The standards for direct transfer of Section R315-266-111;

(iv) The standards for regulation of residues of Section R315-266-112; and

(v) The applicable requirements of Sections R315-264-1 through 151, 1050 through 1065 and 1080 through 1090 and 40 CFR 265.1 through 150, 1050 through 1064, and 1080 through

1090, which are adopted by reference.

(3) If you own or operate a boiler or hydrochloric acid production furnace that is an area source under 40 CFR 63.2 and you elect not to comply with the emission standards under 40 CFR 63.1216, 63.1217, and 63.1218 for particulate matter, semivolatile and low volatile metals, and total chlorine, you also remain subject to:

(i) Section R315-266-105-Standards to control particulate matter;

(ii) Section R315-266-106-Standards to control metals emissions, except for mercury; and

(iii) Section R315-266-107-Standards to control hydrogen chloride and chlorine gas.

(4) The particulate matter standard of Section R315-266-105 remains in effect for boilers that elect to comply with the alternative to the particulate matter standard under 40 CFR 63.1216(e) and 63.1217(e).

(c) The following hazardous wastes and facilities are not subject to regulation under Sections R315-266-100 through 112:

(1) Used oil burned for energy recovery that is also a hazardous waste solely because it exhibits a characteristic of hazardous waste identified in Sections R315-261-20 through 24. Such used oil is subject to regulation under Rule R315-15;

(2) Gas recovered from hazardous or solid waste landfills when such gas is burned for energy recovery;

(3) Hazardous wastes that are exempt from regulation under Section R315-261-4 and Subsections R315-261-6(a)(3)(iii) and (iv), and hazardous wastes that are subject to the special requirements for conditionally exempt small quantity generators under Section R315-261-5; and

(4) Coke ovens, if the only hazardous waste burned is EPA Hazardous Waste No. K087, decanter tank tar sludge from coking operations.

(d) Owners and operators of smelting, melting, and refining furnaces, including pyrometallurgical devices such as cupolas, sintering machines, roasters, and foundry furnaces, but not including cement kilns, aggregate kilns, or halogen acid furnaces burning hazardous waste, that process hazardous waste solely for metal recovery are conditionally exempt from regulation under Sections R315-266-100 through 112, except for Sections R315-266-101 and 266-112.

(1) To be exempt from Sections R315-266-102 through 111, an owner or operator of a metal recovery furnace or mercury recovery furnace shall comply with the following requirements, except that an owner or operator of a lead or a nickel-chromium recovery furnace, or a metal recovery furnace that burns baghouse bags used to capture metallic dusts emitted by steel manufacturing, shall comply with the requirements of Subsection R315-266-100(d)(3), and owners or operators of lead recovery furnaces that are subject to regulation under the Secondary Lead Smelting NESHAP shall comply with the requirements of Subsection R315-266-100(h).

(i) Provide a one-time written notice to the Director indicating the following:

(A) The owner or operator claims exemption under Subsection R315-266-100(d);

(B) The hazardous waste is burned solely for metal recovery consistent with the provisions of Subsection R315-266-100(d)(2);

(C) The hazardous waste contains recoverable levels of metals; and

(D) The owner or operator shall comply with the sampling and analysis and recordkeeping requirements of Subsection R315-266-100(d);

(ii) Sample and analyze the hazardous waste and other feedstocks as necessary to comply with the requirements of Subsection R315-266-100(d) by using appropriate methods; and

(iii) Maintain at the facility for at least three years records to document compliance with the provisions of Subsection

R315-266-100(d) including limits on levels of toxic organic constituents and Btu value of the waste, and levels of recoverable metals in the hazardous waste compared to normal nonhazardous waste feedstocks.

(2) A hazardous waste meeting either of the following criteria is not processed solely for metal recovery:

(i) The hazardous waste has a total concentration of organic compounds listed in Rule R315-261, appendix VIII, exceeding 500 ppm by weight, as-fired, and so is considered to be burned for destruction. The concentration of organic compounds in a waste as-generated may be reduced to the 500 ppm limit by bona fide treatment that removes or destroys organic constituents. Blending for dilution to meet the 500 ppm limit is prohibited and documentation that the waste has not been impermissibly diluted shall be retained in the records required by Subsection R315-266-100(d)(1)(iii); or

(ii) The hazardous waste has a heating value of 5,000 Btu/lb or more, as-fired, and so is considered to be burned as fuel. The heating value of a waste as-generated may be reduced to below the 5,000 Btu/lb limit by bona fide treatment that removes or destroys organic constituents. Blending for dilution to meet the 5,000 Btu/lb limit is prohibited and documentation that the waste has not been impermissibly diluted shall be retained in the records required by Subsection R315-266-100(d)(1)(iii).

(3) To be exempt from Sections R315-266-102 through 111, an owner or operator of a lead or nickel-chromium or mercury recovery furnace, except for owners or operators of lead recovery furnaces subject to regulation under the Secondary Lead Smelting NESHAP, or a metal recovery furnace that burns baghouse bags used to capture metallic dusts emitted by steel manufacturing, shall provide a one-time written notice to the Director identifying each hazardous waste burned and specifying whether the owner or operator claims an exemption for each waste under Subsection R315-266-100(d)(3) or Subsection R315-266-100(d)(1). The owners or operator shall comply with the requirements of Subsection R315-266-100(d)(1) for those wastes claimed to be exempt under Subsection R315-266-100(d)(1) and shall comply with the requirements below for those wastes claimed to be exempt under Subsection R315-266-100(d)(3).

(i) The hazardous wastes listed in appendices XI, XII, and XIII, of Rule R315-266, and baghouse bags used to capture metallic dusts emitted by steel manufacturing are exempt from the requirements of Subsection R315-266-100(d)(1), provided that:

(A) A waste listed in appendix XI of Rule R315-266 shall contain recoverable levels of lead, a waste listed in appendix XII of Rule R315-266 shall contain recoverable levels of nickel or chromium, a waste listed in appendix XIII of Rule R315-266 shall contain recoverable levels of mercury and contain less than 500 ppm of Rule R315-261, appendix VIII organic constituents, and baghouse bags used to capture metallic dusts emitted by steel manufacturing shall contain recoverable levels of metal; and

(B) The waste does not exhibit the Toxicity Characteristic of Section R315-261-24 for an organic constituent; and

(C) The waste is not a hazardous waste listed in Sections R315-261-30 through 35 because it is listed for an organic constituent as identified in appendix VII of Rule R315-261; and

(D) The owner or operator certifies in the one-time notice that hazardous waste is burned under the provisions of Subsection R315-266-100(d)(3) and that sampling and analysis will be conducted or other information will be obtained as necessary to ensure continued compliance with these requirements. Sampling and analysis shall be conducted according to Subsection R315-266-100(d)(1)(ii) and records to document compliance with Subsection R315-266-100(d)(3) shall be kept for at least three years.

(ii) The Director may decide on a case-by-case basis that the toxic organic constituents in a material listed in appendix XI, XII, or XIII of Rule R315-266 that contains a total concentration of more than 500 ppm toxic organic compounds listed in appendix VIII, of Rule R315-261, may pose a hazard to human health and the environment when burned in a metal recovery furnace exempt from the requirements of Sections R315-266-100 through 112. In that situation, after adequate notice and opportunity for comment, the metal recovery furnace shall become subject to the requirements of Sections R315-266-100 through 112 when burning that material. In making the hazard determination, the Director shall consider the following factors:

(A) The concentration and toxicity of organic constituents in the material; and

(B) The level of destruction of toxic organic constituents provided by the furnace; and

(C) Whether the acceptable ambient levels established in appendices IV or V of Rule R315-266 may be exceeded for any toxic organic compound that may be emitted based on dispersion modeling to predict the maximum annual average off-site ground level concentration.

(e) The standards for direct transfer operations under Section R315-266-111 apply only to facilities subject to the permit standards of Section R315-266-102 or the interim status standards of Section R315-266-103.

(f) The management standards for residues under Section R315-266-112 apply to any boiler or industrial furnace burning hazardous waste.

(g) Owners and operators of smelting, melting, and refining furnaces, including pyrometallurgical devices such as cupolas, sintering machines, roasters, and foundry furnaces, that process hazardous waste for recovery of economically significant amounts of the precious metals gold, silver, platinum, palladium, iridium, osmium, rhodium, or ruthenium, or any combination of these are conditionally exempt from regulation under Sections R315-266-100 through 111. To be exempt from Sections R315-266-101 through 111, an owner or operator shall:

(1) Provide a one-time written notice to the Director indicating the following:

(i) The owner or operator claims exemption under Subsection R315-266-100(g);

(ii) The hazardous waste is burned for legitimate recovery of precious metal; and

(iii) The owner or operator shall comply with the sampling and analysis and recordkeeping requirements of Subsection R315-266-100(g); and

(2) Sample and analyze the hazardous waste as necessary to document that the waste contains economically significant amounts of the metals and that the treatment recovers economically significant amounts of precious metal; and

(3) Maintain at the facility for at least three years records to document that all hazardous wastes burned are burned for recovery of economically significant amounts of precious metal.

(h) Starting June 23, 1997, owners or operators of lead recovery furnaces that process hazardous waste for recovery of lead and that are subject to regulation under the Secondary Lead Smelting NESHAP, are conditionally exempt from regulation under Section R315-266-100 through 112, except for Subsection R315-266-101. To be exempt, an owner or operator shall provide a one-time notice to the Director identifying each hazardous waste burned and specifying that the owner or operator claims an exemption under Subsection R315-266-100(h). The notice also shall state that the waste burned has a total concentration of non-metal compounds listed in Rule R315-261, appendix VIII, of less than 500 ppm by weight, as fired and as provided in Subsection R315-266-100(d)(2)(i), or is listed in appendix XI to Rule R315-266.

R315-266-101. Hazardous Waste Burned in Boilers and Industrial Furnaces -- Management Prior to Burning.

(a) Generators. Generators of hazardous waste that is burned in a boiler or industrial furnace are subject to Rule R315-262.

(b) Transporters. Transporters of hazardous waste that is burned in a boiler or industrial furnace are subject to Rule R315-263.

(c) Storage and treatment facilities.

(1) Owners and operators of facilities that store or treat hazardous waste that is burned in a boiler or industrial furnace are subject to the applicable provisions of Rules R315-264, 265 and 270, except as provided by Subsection R315-266-101(c)(2). These standards apply to storage and treatment by the burner as well as to storage and treatment facilities operated by intermediaries, processors, blenders, distributors, etc., between the generator and the burner.

(2) Owners and operators of facilities that burn, in an onsite boiler or industrial furnace exempt from regulation under the small quantity burner provisions of Section R315-266-108, hazardous waste that they generate are exempt from the regulations of Rules R315-264, 265 and 270 applicable to storage units for those storage units that store mixtures of hazardous waste and the primary fuel to the boiler or industrial furnace in tanks that feed the fuel mixture directly to the burner. Storage of hazardous waste prior to mixing with the primary fuel is subject to regulation as prescribed in Subsection R315-266-101(c)(1).

R315-266-102. Hazardous Waste Burned in Boilers and Industrial Furnaces -- Permit Standards for Burners.

(a) Applicability

(1) General. Owners and operators of boilers and industrial furnaces burning hazardous waste and not operating under interim status shall comply with the requirements of Section R315-266-102 and Sections R315-270-22 and 66, unless exempt under the small quantity burner exemption of Subsections R315-266-108.

(2) Applicability of Rule R315-264 standards. Owners and operators of boilers and industrial furnaces that burn hazardous waste are subject to the following provisions of Rule R315-264, except as provided otherwise by Sections R315-266-100 through 112:

(i) Section R315-264-4, General;

(ii) Sections R315-264-11 through 18, General facility standards;

(iii) Sections R315-264-31 through 37, Preparedness and prevention;

(iv) Sections R315-264-51 through 56, Contingency plan and emergency procedures;

(v) The applicable provisions of Sections R315-264-71 through 77, Manifest system, recordkeeping, and reporting;

(vi) Sections R315-264-90 and 101, Releases from Solid Waste Management Units;

(vii) Sections R315-264-111 through 115, Closure and post-closure;

(viii) Sections R315-264-141 through 143 and 147 through 151, Financial requirements; except that States and the Federal government are exempt from the requirements of Sections R315-264-140 through 151; and

(ix) Sections R315-264-1050 through 1065, Air emission standards for equipment leaks, except Subsections R315-264-1050(a).

(b) Hazardous waste analysis.

(1) The owner or operator shall provide an analysis of the hazardous waste that quantifies the concentration of any constituent identified in appendix VIII of Rule R315-261 that may reasonably be expected to be in the waste. Such constituents shall be identified and quantified if present, at

levels detectable by using appropriate analytical procedures. The appendix VIII, Rule R315-261 constituents excluded from this analysis shall be identified and the basis for their exclusion explained. This analysis shall be used to provide all information required by Sections R315-266-100 through 112 and Subsections R315-270-22 and 66 and to enable the permit writer to prescribe such permit conditions as necessary to protect human health and the environment. Such analysis shall be included as a portion of the part B permit application, or, for facilities operating under the interim status standards of Sections R315-266-100 through 112, as a portion of the trial burn plan that may be submitted before the part B application under provisions of Subsections R315-270-66(g) as well as any other analysis required by the permit authority in preparing the permit. Owners and operators of boilers and industrial furnaces not operating under the interim status standards shall provide the information required by Subsections R315-270-22 or 66(c) in the part B application to the greatest extent possible.

(2) Throughout normal operation, the owner or operator shall conduct sampling and analysis as necessary to ensure that the hazardous waste, other fuels, and industrial furnace feedstocks fired into the boiler or industrial furnace are within the physical and chemical composition limits specified in the permit.

(c) Emissions standards. Owners and operators shall comply with emissions standards provided by Subsections R315-266-104 through 107.

(d) Permits.

(1) The owner or operator may burn only hazardous wastes specified in the facility permit and only under the operating conditions specified under Subsection R315-266-102(e), except in approved trial burns under the conditions specified in Section R315-270-66.

(2) Hazardous wastes not specified in the permit may not be burned until operating conditions have been specified under a new permit or permit modification, as applicable. Operating requirements for new wastes may be based on either trial burn results or alternative data included with part B of a permit application under Section R315-270-22.

(3) Boilers and industrial furnaces operating under the interim status standards of Section R315-266-103 are permitted under procedures provided by Subsections R315-270-66(g).

(4) A permit for a new boiler or industrial furnace, those boilers and industrial furnaces not operating under the interim status standards, shall establish appropriate conditions for each of the applicable requirements of Section R315-266-102, including but not limited to allowable hazardous waste firing rates and operating conditions necessary to meet the requirements of Subsection R315-266-102(e), in order to comply with the following standards:

(i) For the period beginning with initial introduction of hazardous waste and ending with initiation of the trial burn, and only for the minimum time required to bring the device to a point of operational readiness to conduct a trial burn, not to exceed a duration of 720 hours operating time when burning hazardous waste, the operating requirements shall be those most likely to ensure compliance with the emission standards of Sections R315-266-104 through 107, based on the Director's engineering judgment. If the applicant is seeking a waiver from a trial burn to demonstrate conformance with a particular emission standard, the operating requirements during this initial period of operation shall include those specified by the applicable provisions of Sections R315-266-104, 105, 106, or 107. The Director may extend the duration of this period for up to 720 additional hours when good cause for the extension is demonstrated by the applicant.

(ii) For the duration of the trial burn, the operating requirements shall be sufficient to demonstrate compliance with the emissions standards of Sections R315-266-104 through 107

and shall be in accordance with the approved trial burn plan;

(iii) For the period immediately following completion of the trial burn, and only for the minimum period sufficient to allow sample analysis, data computation, submission of the trial burn results by the applicant, review of the trial burn results and modification of the facility permit by the Director to reflect the trial burn results, the operating requirements shall be those most likely to ensure compliance with the emission standards Sections R315-266-104 through 107 based on the Director's engineering judgment.

(iv) For the remaining duration of the permit, the operating requirements shall be those demonstrated in a trial burn or by alternative data specified in Section R315-270-22, as sufficient to ensure compliance with the emissions standards of Sections R315-266-104 through 107.

(e) Operating requirements

(1) General. A boiler or industrial furnace burning hazardous waste shall be operated in accordance with the operating requirements specified in the permit at all times where there is hazardous waste in the unit.

(2) Requirements to ensure compliance with the organic emissions standards

(i) DRE standard. Operating conditions shall be specified either on a case-by-case basis for each hazardous waste burned as those demonstrated, in a trial burn or by alternative data as specified in Sections R315-270-22, to be sufficient to comply with the destruction and removal efficiency (DRE) performance standard of Subsection R315-266-104(a) or as those special operating requirements provided by Subsection R315-266-104(a)(4) for the waiver of the DRE trial burn. When the DRE trial burn is not waived under Subsection R315-266-104(a)(4), each set of operating requirements shall specify the composition of the hazardous waste, including acceptable variations in the physical and chemical properties of the hazardous waste which will not affect compliance with the DRE performance standard, to which the operating requirements apply. For each such hazardous waste, the permit shall specify acceptable operating limits including, but not limited to, the following conditions as appropriate:

(A) Feed rate of hazardous waste and other fuels measured and specified as prescribed in Subsection R315-266-102(e)(6);

(B) Minimum and maximum device production rate when producing normal product expressed in appropriate units, measured and specified as prescribed in Subsection R315-266-102(e)(6);

(C) Appropriate controls of the hazardous waste firing system;

(D) Allowable variation in boiler and industrial furnace system design or operating procedures;

(E) Minimum combustion gas temperature measured at a location indicative of combustion chamber temperature, measured and specified as prescribed in Subsection R315-266-102(e)(6);

(F) An appropriate indicator of combustion gas velocity, measured and specified as prescribed in Subsection R315-266-102(e)(6), unless documentation is provided under Section R315-270-66 demonstrating adequate combustion gas residence time; and

(G) Such other operating requirements as are necessary to ensure that the DRE performance standard of Subsection R315-266-104(a) is met.

(ii) Carbon monoxide and hydrocarbon standards. The permit shall incorporate a carbon monoxide (CO) limit and, as appropriate, a hydrocarbon (HC) limit as provided by Subsections R315-266-104(b), (c), (d), (e) and (f). The permit limits shall be specified as follows:

(A) When complying with the CO standard of Subsections R315-266-104(b)(1), the permit limit is 100 ppmv;

(B) When complying with the alternative CO standard

under Subsection R315-266-104(c), the permit limit for CO is based on the trial burn and is established as the average over all valid runs of the highest hourly rolling average CO level of each run, and the permit limit for HC is 20 ppmv, as defined in Subsection R315-266-104(c)(1), except as provided in Subsection R315-266-104(f).

(C) When complying with the alternative HC limit for industrial furnaces under Subsection R315-266-104(f), the permit limit for HC and CO is the baseline level when hazardous waste is not burned as specified by Subsection R315-266-104(f).

(iii) Start-up and shut-down. During start-up and shut-down of the boiler or industrial furnace, hazardous waste, except waste fed solely as an ingredient under the Tier I, or adjusted Tier I, feed rate screening limits for metals and chloride/chlorine, and except low risk waste exempt from the trial burn requirements under Subsections R315-266-104(a)(5) and R315-266-105 through 107, shall not be fed into the device unless the device is operating within the conditions of operation specified in the permit.

(3) Requirements to ensure conformance with the particulate standard.

(i) Except as provided in Subsections R315-266-102(e)(3)(ii) and (iii), the permit shall specify the following operating requirements to ensure conformance with the particulate standard specified in Section R315-266-105:

(A) Total ash feed rate to the device from hazardous waste, other fuels, and industrial furnace feedstocks, measured and specified as prescribed in Subsection R315-266-102(e)(6);

(B) Maximum device production rate when producing normal product expressed in appropriate units, and measured and specified as prescribed in Subsection R315-266-102(e)(6);

(C) Appropriate controls on operation and maintenance of the hazardous waste firing system and any air pollution control system;

(D) Allowable variation in boiler and industrial furnace system design including any air pollution control system or operating procedures; and

(E) Such other operating requirements as are necessary to ensure that the particulate standard in Subsection R315-266-105(a) is met.

(ii) Permit conditions to ensure conformance with the particulate matter standard shall not be provided for facilities exempt from the particulate matter standard under Subsection R315-266-105(b);

(iii) For cement kilns and light-weight aggregate kilns, permit conditions to ensure compliance with the particulate standard shall not limit the ash content of hazardous waste or other feed materials.

(4) Requirements to ensure conformance with the metals emissions standard.

(i) For conformance with the Tier I, or adjusted Tier I, metals feed rate screening limits of Subsections R315-266-106(b) or (e), the permit shall specify the following operating requirements:

(A) Total feed rate of each metal in hazardous waste, other fuels, and industrial furnace feedstocks measured and specified under provisions of Subsection R315-266-102(e)(6);

(B) Total feed rate of hazardous waste measured and specified as prescribed in Subsection R315-266-102(e)(6);

(C) A sampling and metals analysis program for the hazardous waste, other fuels, and industrial furnace feedstocks;

(ii) For conformance with the Tier II metals emission rate screening limits under Subsection R315-266-106(c) and the Tier III metals controls under Subsection R315-266-106(d), the permit shall specify the following operating requirements:

(A) Maximum emission rate for each metal specified as the average emission rate during the trial burn;

(B) Feed rate of total hazardous waste and pumpable hazardous waste, each measured and specified as prescribed in

Subsection R315-266-102(e)(6)(i);

(C) Feed rate of each metal in the following feedstreams, measured and specified as prescribed in Subsection R315-266-102(e)(6):

(I) Total feedstreams;

(II) Total hazardous waste feed; and

(III) Total pumpable hazardous waste feed;

(D) Total feed rate of chlorine and chloride in total feedstreams measured and specified as prescribed in Subsection R315-266-102(e)(6);

(E) Maximum combustion gas temperature measured at a location indicative of combustion chamber temperature, and measured and specified as prescribed in Subsection R315-266-102(e)(6);

(F) Maximum flue gas temperature at the inlet to the particulate matter air pollution control system measured and specified as prescribed in Subsection R315-266-102(e)(6);

(G) Maximum device production rate when producing normal product expressed in appropriate units and measured and specified as prescribed in Subsection R315-266-102(e)(6);

(H) Appropriate controls on operation and maintenance of the hazardous waste firing system and any air pollution control system;

(I) Allowable variation in boiler and industrial furnace system design including any air pollution control system or operating procedures; and

(J) Such other operating requirements as are necessary to ensure that the metals standards under Subsections R315-266-106(c) or 106(d) are met.

(iii) For conformance with an alternative implementation approach approved by the Director under Subsection R315-266-106(f), the permit shall specify the following operating requirements:

(A) Maximum emission rate for each metal specified as the average emission rate during the trial burn;

(B) Feed rate of total hazardous waste and pumpable hazardous waste, each measured and specified as prescribed in Subsection R315-266-102(e)(6)(i);

(C) Feed rate of each metal in the following feedstreams, measured and specified as prescribed in Subsection R315-266-102(e)(6):

(I) Total hazardous waste feed; and

(II) Total pumpable hazardous waste feed;

(D) Total feed rate of chlorine and chloride in total feedstreams measured and specified prescribed in Subsection R315-266-102(e)(6);

(E) Maximum combustion gas temperature measured at a location indicative of combustion chamber temperature, and measured and specified as prescribed in Subsection R315-266-102(e)(6);

(F) Maximum flue gas temperature at the inlet to the particulate matter air pollution control system measured and specified as prescribed in Subsection R315-266-102(e)(6);

(G) Maximum device production rate when producing normal product expressed in appropriate units and measured and specified as prescribed in Subsection R315-266-102(e)(6);

(H) Appropriate controls on operation and maintenance of the hazardous waste firing system and any air pollution control system;

(I) Allowable variation in boiler and industrial furnace system design including any air pollution control system or operating procedures; and

(J) Such other operating requirements as are necessary to ensure that the metals standards under Subsections R315-266-106(c) or 106(d) are met.

(5) Requirements to ensure conformance with the hydrogen chloride and chlorine gas standards.

(i) For conformance with the Tier I total chloride and chlorine feed rate screening limits of Subsection R315-266-

107(b)(1), the permit shall specify the following operating requirements:

(A) Feed rate of total chloride and chlorine in hazardous waste, other fuels, and industrial furnace feedstocks measured and specified as prescribed in Subsection R315-266-102(e)(6);

(B) Feed rate of total hazardous waste measured and specified as prescribed in Subsection R315-266-102(e)(6);

(C) A sampling and analysis program for total chloride and chlorine for the hazardous waste, other fuels, and industrial furnace feedstocks;

(ii) For conformance with the Tier II HCl and Cl₂ emission rate screening limits under Subsection R315-266-107(b)(2) and the Tier III HCl and Cl₂ controls under Subsection R315-266-107(c), the permit shall specify the following operating requirements:

(A) Maximum emission rate for HCl and for Cl₂ specified as the average emission rate during the trial burn;

(B) Feed rate of total hazardous waste measured and specified as prescribed in Subsection R315-266-102(e)(6);

(C) Total feed rate of chlorine and chloride in total feedstreams, measured and specified as prescribed in Subsection R315-266-102(e)(6);

(D) Maximum device production rate when producing normal product expressed in appropriate units, measured and specified as prescribed in Subsection R315-266-102(e)(6);

(E) Appropriate controls on operation and maintenance of the hazardous waste firing system and any air pollution control system;

(F) Allowable variation in boiler and industrial furnace system design including any air pollution control system or operating procedures; and

(G) Such other operating requirements as are necessary to ensure that the HCl and Cl₂ standards under Subsections R315-266-107 (b)(2) or (c) are met.

(6) Measuring parameters and establishing limits based on trial burn data

(i) General requirements. As specified in Subsections R315-266-102(e)(2) through (e)(5), each operating parameter shall be measured, and permit limits on the parameter shall be established, according to either of the following procedures:

(A) Instantaneous limits. A parameter may be measured and recorded on an instantaneous basis, i.e., the value that occurs at any time, and the permit limit specified as the time-weighted average during all valid runs of the trial burn; or

(B) Hourly rolling average. The limit for a parameter may be established and continuously monitored on an hourly rolling average basis defined as follows:

(I) A continuous monitor is one which continuously samples the regulated parameter without interruption, and evaluates the detector response at least once each 15 seconds, and computes and records the average value at least every 60 seconds.

(II) An hourly rolling average is the arithmetic mean of the 60 most recent 1-minute average values recorded by the continuous monitoring system.

(III) The permit limit for the parameter shall be established based on trial burn data as the average over all valid test runs of the highest hourly rolling average value for each run.

(ii) Rolling average limits for carcinogenic metals and lead. Feed rate limits for the carcinogenic metals, i.e., arsenic, beryllium, cadmium and chromium, and lead may be established either on an hourly rolling average basis as prescribed by Subsection R315-266-102(e)(6)(i) or on, up to, a 24 hour rolling average basis. If the owner or operator elects to use an average period from 2 to 24 hours:

(A) The feed rate of each metal shall be limited at any time to ten times the feed rate that would be allowed on an hourly rolling average basis;

(B) The continuous monitor shall meet the following

specifications:

(I) A continuous monitor is one which continuously samples the regulated parameter without interruption, and evaluates the detector response at least once each 15 seconds, and computes and records the average value at least every 60 seconds.

(I) The rolling average for the selected averaging period is defined as the arithmetic mean of one hour block averages for the averaging period. A one hour block average is the arithmetic mean of the one minute averages recorded during the 60-minute period beginning at one minute after the beginning of the preceding clock hour; and

(C) The permit limit for the feed rate of each metal shall be established based on trial burn data as the average over all valid test runs of the highest hourly rolling average feed rate for each run.

(iii) Feed rate limits for metals, total chloride and chlorine, and ash. Feed rate limits for metals, total chlorine and chloride, and ash are established and monitored by knowing the concentration of the substance, i.e., metals, chloride/chlorine, and ash, in each feedstream and the flow rate of the feedstream. To monitor the feed rate of these substances, the flow rate of each feedstream shall be monitored under the continuous monitoring requirements of Subsections R315-266-102(e)(6)(i) and (ii).

(iv) Conduct of trial burn testing.

(A) If compliance with all applicable emissions standards of Sections R315-266-104 through 107 is not demonstrated simultaneously during a set of test runs, the operating conditions of additional test runs required to demonstrate compliance with remaining emissions standards shall be as close as possible to the original operating conditions.

(B) Prior to obtaining test data for purposes of demonstrating compliance with the emissions standards of Sections R315-266-104 through 107 or establishing limits on operating parameters under Section R315-266-102, the facility shall operate under trial burn conditions for a sufficient period to reach steady-state operations. The Director may determine, however, that industrial furnaces that recycle collected particulate matter back into the furnace and that comply with an alternative implementation approach for metals under Subsection R315-266-106(f) need not reach steady state conditions with respect to the flow of metals in the system prior to beginning compliance testing for metals emissions.

(C) Trial burn data on the level of an operating parameter for which a limit shall be established in the permit shall be obtained during emissions sampling for the pollutant(s), i.e., metals, PM, HCl/Cl₂, organic compounds, for which the parameter shall be established as specified by Subsection R315-266-102(e).

(7) General requirements

(i) Fugitive emissions. Fugitive emissions shall be controlled by:

(A) Keeping the combustion zone totally sealed against fugitive emissions; or

(B) Maintaining the combustion zone pressure lower than atmospheric pressure; or

(C) An alternate means of control demonstrated, with part B of the permit application, to provide fugitive emissions control equivalent to maintenance of combustion zone pressure lower than atmospheric pressure.

(ii) Automatic waste feed cutoff. A boiler or industrial furnace shall be operated with a functioning system that automatically cuts off the hazardous waste feed when operating conditions deviate from those established under Section R315-266-102. The Director may limit the number of cutoffs per an operating period on a case-by-case basis. In addition:

(A) The permit limit for, the indicator of, minimum combustion chamber temperature shall be maintained while

hazardous waste or hazardous waste residues remain in the combustion chamber,

(B) Exhaust gases shall be ducted to the air pollution control system operated in accordance with the permit requirements while hazardous waste or hazardous waste residues remain in the combustion chamber; and

(C) Operating parameters for which permit limits are established shall continue to be monitored during the cutoff, and the hazardous waste feed shall not be restarted until the levels of those parameters comply with the permit limits. For parameters that may be monitored on an instantaneous basis, the Director shall establish a minimum period of time after a waste feed cutoff during which the parameter shall not exceed the permit limit before the hazardous waste feed may be restarted.

(iii) Changes. A boiler or industrial furnace shall cease burning hazardous waste when changes in combustion properties, or feed rates of the hazardous waste, other fuels, or industrial furnace feedstocks, or changes in the boiler or industrial furnace design or operating conditions deviate from the limits as specified in the permit.

(8) Monitoring and Inspections.

(i) The owner or operator shall monitor and record the following, at a minimum, while burning hazardous waste:

(A) If specified by the permit, feed rates and composition of hazardous waste, other fuels, and industrial furnace feedstocks, and feed rates of ash, metals, and total chloride and chlorine;

(B) If specified by the permit, carbon monoxide (CO), hydrocarbons (HC), and oxygen on a continuous basis at a common point in the boiler or industrial furnace downstream of the combustion zone and prior to release of stack gases to the atmosphere in accordance with operating requirements specified in Subsection R315-266-102(e)(2)(ii). CO, HC, and oxygen monitors shall be installed, operated, and maintained in accordance with methods specified in appendix IX of Rule R315-266.

(C) Upon the request of the Director, sampling and analysis of the hazardous waste, and other fuels and industrial furnace feedstocks as appropriate, residues, and exhaust emissions shall be conducted to verify that the operating requirements established in the permit achieve the applicable standards of Sections R315-266-104 through 107.

(ii) All monitors shall record data in units corresponding to the permit limit unless otherwise specified in the permit.

(iii) The boiler or industrial furnace and associated equipment, pumps, valves, pipes, fuel storage tanks, etc., shall be subjected to thorough visual inspection when it contains hazardous waste, at least daily for leaks, spills, fugitive emissions, and signs of tampering.

(iv) The automatic hazardous waste feed cutoff system and associated alarms shall be tested at least once every 7 days when hazardous waste is burned to verify operability, unless the applicant demonstrates to the Director that weekly inspections will unduly restrict or upset operations and that less frequent inspections will be adequate. At a minimum, operational testing shall be conducted at least once every 30 days.

(v) These monitoring and inspection data shall be recorded and the records shall be placed in the operating record required by Section R315-264-73.

(9) Direct transfer to the burner. If hazardous waste is directly transferred from a transport vehicle to a boiler or industrial furnace without the use of a storage unit, the owner and operator shall comply with Section R315-266-111.

(10) Recordkeeping. The owner or operator shall maintain in the operating record of the facility all information and data required by Section R315-266-102 for five years.

(11) Closure. At closure, the owner or operator shall remove all hazardous waste and hazardous waste residues, including, but not limited to, ash, scrubber waters, and scrubber

sludges, from the boiler or industrial furnace.

R315-266-103. Hazardous Waste Burned in Boilers and Industrial Furnaces -- Interim Status Standards for Burners.

(a) Purpose, scope, applicability

(1) General.

(i) The purpose of Section R315-266-103 is to establish minimum national standards for owners and operators of "existing" boilers and industrial furnaces that burn hazardous waste where such standards define the acceptable management of hazardous waste during the period of interim status. The standards of Section R315-266-103 apply to owners and operators of existing facilities until either a permit is issued under Section R315-266-102(d) or until closure responsibilities identified in Section R315-266-103 are fulfilled.

(ii) Existing or in existence means a boiler or industrial furnace that on or before August 21, 1991 is either in operation burning or processing hazardous waste or for which construction, including the ancillary facilities to burn or to process the hazardous waste, has commenced. A facility has commenced construction if the owner or operator has obtained the Federal, State, and local approvals or permits necessary to begin physical construction; and either:

(A) A continuous on-site, physical construction program has begun; or

(B) The owner or operator has entered into contractual obligations which cannot be canceled or modified without substantial loss-for physical construction of the facility to be completed within a reasonable time.

(iii) If a boiler or industrial furnace is located at a facility that already has a permit or interim status, then the facility shall comply with the applicable regulations dealing with permit modifications in Section R315-270-42 or changes in interim status in Section R315-270-72.

(2) Exemptions. The requirements of Section R315-266-103 do not apply to hazardous waste and facilities exempt under Subsection R315-266-100(b), or Section R315-266-108.

(3) Prohibition on burning dioxin-listed wastes. The following hazardous waste listed for dioxin and hazardous waste derived from any of these wastes may not be burned in a boiler or industrial furnace operating under interim status: F020, F021, F022, F023, F026, and F027.

(4) Applicability of Rule R315-265 standards. Owners and operators of boilers and industrial furnaces that burn hazardous waste and are operating under interim status are subject to the following provisions of Rule R315-265, except as provided otherwise by Section R315-266-103:

(i) 40 CFR 265.4, which is adopted by reference, General;

(ii) 40 CFR 265.11 through 17, which are adopted by reference, General facility standards;

(iii) 40 CFR 265.31 through 37, which are adopted by reference, Preparedness and prevention;

(iv) 40 CFR 265.51 through 56, which are adopted by reference, Contingency plan and emergency procedures;

(v) 40 CFR 265.71 through 77, which are adopted by reference, Manifest system, recordkeeping, and reporting, except that 40 CFR 265.265.71, 72, and 76, which are incorporated by reference in Rule R315-265, do not apply to owners and operators of on-site facilities that do not receive any hazardous waste from off-site sources;

(vi) 40 CFR 265.111 through 115, which are adopted by reference, Closure and post-closure;

(vii) 40 CFR 265.141, 142, 143, and 147 through 150, which are adopted by reference, Financial requirements, except that States and the Federal government are exempt from the requirements of 40 CFR 265.140 through 150, which are adopted by reference; and

(viii) 40 CFR 265.1050 through 1064, which are adopted by reference, Air emission standards for equipment leaks, except

265-1050(a).

(5) Special requirements for furnaces. The following controls apply during interim status to industrial furnaces, e.g., kilns, cupolas, that feed hazardous waste for a purpose other than solely as an ingredient, see Subsection R315-266-103(a)(5)(ii), at any location other than the hot end where products are normally discharged or where fuels are normally fired:

(i) Controls.

(A) The hazardous waste shall be fed at a location where combustion gas temperatures are at least 1800 deg. F;

(B) The owner or operator shall determine that adequate oxygen is present in combustion gases to combust organic constituents in the waste and retain documentation of such determination in the facility record;

(C) For cement kiln systems, the hazardous waste shall be fed into the kiln; and

(D) The hydrocarbon controls of Subsections R315-266-104(c) or 103(c)(5) apply upon certification of compliance under Subsection R315-266-103(c) irrespective of the CO level achieved during the compliance test.

(ii) Burning hazardous waste solely as an ingredient. A hazardous waste is burned for a purpose other than solely as an ingredient if it meets either of these criteria:

(A) The hazardous waste has a total concentration of nonmetal compounds listed in Rule R315-261, appendix VIII, exceeding 500 ppm by weight, as-fired, and so is considered to be burned for destruction. The concentration of nonmetal compounds in a waste as-generated may be reduced to the 500 ppm limit by bona fide treatment that removes or destroys nonmetal constituents. Blending for dilution to meet the 500 ppm limit is prohibited and documentation that the waste has not been impermissibly diluted shall be retained in the facility record; or

(B) The hazardous waste has a heating value of 5,000 Btu/lb or more, as-fired, and so is considered to be burned as fuel. The heating value of a waste as-generated may be reduced to below the 5,000 Btu/lb limit by bona fide treatment that removes or destroys organic constituents. Blending to augment the heating value to meet the 5,000 Btu/lb limit is prohibited and documentation that the waste has not been impermissibly blended shall be retained in the facility record.

(6) Restrictions on burning hazardous waste that is not a fuel. Prior to certification of compliance under Subsection R315-266-103(c), owners and operators shall not feed hazardous waste that has a heating value less than 5,000 Btu/lb, as-generated, except that the heating value of a waste as-generated may be increased to above the 5,000 Btu/lb limit by bona fide treatment; however, blending to augment the heating value to meet the 5,000 Btu/lb limit is prohibited and records shall be kept to document that impermissible blending has not occurred, in a boiler or industrial furnace, except that:

(i) Hazardous waste may be burned solely as an ingredient; or

(ii) Hazardous waste may be burned for purposes of compliance testing, or testing prior to compliance testing, for a total period of time not to exceed 720 hours; or

(iii) Such waste may be burned if the Director has documentation to show that, prior to August 21, 1991:

(A) The boiler or industrial furnace is operating under the interim status standards for incinerators provided by 40 CFR 265.340 through 352, which are adopted by reference, or the interim status standards for thermal treatment units provided by 40 CFR 265.370 through 383, which are adopted by reference; and

(B) The boiler or industrial furnace met the interim status eligibility requirements under Section R315-270-70 for 40 CFR 265.340 through 383, which are adopted by reference; and

(C) Hazardous waste with a heating value less than 5,000

Btu/lb was burned prior to that date; or

(iv) Such waste may be burned in a halogen acid furnace if the waste was burned as an excluded ingredient under Section R315-261-2(e) prior to February 21, 1991 and documentation is kept on file supporting this claim.

(7) Direct transfer to the burner. If hazardous waste is directly transferred from a transport vehicle to a boiler or industrial furnace without the use of a storage unit, the owner and operator shall comply with Section R315-266-111.

(b) Certification of precompliance

(1) General. The owner or operator shall provide complete and accurate information specified in Subsection R315-266-103(b)(2) to the Director on or before August 21, 1991, and shall establish limits for the operating parameters specified in Subsection R315-266-103(b)(3). Such information is termed a "certification of precompliance" and constitutes a certification that the owner or operator has determined that, when the facility is operated within the limits specified in Subsection R315-266-103(b)(3), the owner or operator believes that, using best engineering judgment, emissions of particulate matter, metals, and HCl and Cl₂ are not likely to exceed the limits provided by Sections R315-266-105 through 107. The facility may burn hazardous waste only under the operating conditions that the owner or operator establishes under Subsection R315-266-103(b)(3) until the owner or operator submits a revised certification of precompliance under Subsection R315-266-103(b)(8) or a certification of compliance under Subsection R315-266-103(c), or until a permit is issued.

(2) Information required. The following information shall be submitted with the certification of precompliance to support the determination that the limits established for the operating parameters identified in Subsection R315-266-103(b)(3) are not likely to result in an exceedance of the allowable emission rates for particulate matter, metals, and HCl and Cl₂.

(i) General facility information:

(A) EPA facility ID number;

(B) Facility name, contact person, telephone number, and address;

(C) Description of boilers and industrial furnaces burning hazardous waste, including type and capacity of device;

(D) A scaled plot plan showing the entire facility and location of the boilers and industrial furnaces burning hazardous waste; and

(E) A description of the air pollution control system on each device burning hazardous waste, including the temperature of the flue gas at the inlet to the particulate matter control system.

(ii) Except for facilities complying with the Tier I or Adjusted Tier I feed rate screening limits for metals or total chlorine and chloride provided by Subsections R315-266-106(b) or (e) and 107(b)(1) or (e), respectively, the estimated uncontrolled, at the inlet to the air pollution control system, emissions of particulate matter, each metal controlled by Section R315-266-106, and hydrogen chloride and chlorine, and the following information to support such determinations:

(A) The feed rate (lb/hr) of ash, chlorine, antimony, arsenic, barium, beryllium, cadmium, chromium, lead, mercury, silver, and thallium in each feedstream, hazardous waste, other fuels, industrial furnace feedstocks;

(B) The estimated partitioning factor to the combustion gas for the materials identified in Subsection R315-266-103(b)(2)(ii)(A) and the basis for the estimate and an estimate of the partitioning to HCl and Cl₂ of total chloride and chlorine in feed materials. To estimate the partitioning factor, the owner or operator shall use either best engineering judgment or the procedures specified in appendix IX of Rule R315-266.

(C) For industrial furnaces that recycle collected particulate matter (PM) back into the furnace and that will certify compliance with the metals emissions standards under

Subsection R315-266-103(c)(3)(ii)(A), the estimated enrichment factor for each metal. To estimate the enrichment factor, the owner or operator shall use either best engineering judgment or the procedures specified in "Alternative Methodology for Implementing Metals Controls" in appendix IX Rule R315-266.

(D) If best engineering judgment is used to estimate partitioning factors or enrichment factors under Subsections R315-266-103(b)(2)(ii)(B) or (b)(2)(ii)(C) respectively, the basis for the judgment. When best engineering judgment is used to develop or evaluate data or information and make determinations under Section R315-266-103, the determinations shall be made by a qualified, registered professional engineer and a certification of his/her determinations in accordance with Subsection R315-270-11(d) shall be provided in the certification of precompliance.

(iii) For facilities complying with the Tier I or Adjusted Tier I feed rate screening limits for metals or total chlorine and chloride provided by Subsections R315-266-106(b) or (e) and 107(b)(1) or (e), the feed rate (lb/hr) of total chlorine and chlorine, antimony, arsenic, barium, beryllium, cadmium, chromium, lead, mercury, silver, and thallium in each feed stream, hazardous waste, other fuels, industrial furnace feedstocks.

(iv) For facilities complying with the Tier II or Tier III emission limits for metals or HCl and Cl₂, under Subsections R315-266-106(c) or (d) or 107(b)(2) or (c), the estimated controlled, outlet of the air pollution control system, emissions rates of particulate matter, each metal controlled by Section R315-266-106, and HCl and Cl₂, and the following information to support such determinations:

(A) The estimated air pollution control system (APCS) removal efficiency for particulate matter, HCl, Cl₂, antimony, arsenic, barium, beryllium, cadmium, chromium, lead, mercury, silver, and thallium.

(B) To estimate APCS removal efficiency, the owner or operator shall use either best engineering judgment or the procedures prescribed in appendix IX of Rule R315-266.

(C) If best engineering judgment is used to estimate APCS removal efficiency, the basis for the judgment. Use of best engineering judgment shall be in conformance with provisions of Subsection R315-266-103(b)(2)(ii)(D).

(v) Determination of allowable emissions rates for HCl, Cl₂, antimony, arsenic, barium, beryllium, cadmium, chromium, lead, mercury, silver, and thallium, and the following information to support such determinations:

(A) For all facilities:

(I) Physical stack height;

(II) Good engineering practice stack height as defined by 40 CFR 51.100(ii);

(III) Maximum flue gas flow rate;

(IV) Maximum flue gas temperature;

(V) Attach a US Geological Service topographic map, or equivalent, showing the facility location and surrounding land within 5 km of the facility;

(VI) Identify terrain type: complex or noncomplex; and

(VII) Identify land use: urban or rural.

(B) For owners and operators using Tier III site specific dispersion modeling to determine allowable levels under Subsection R315-266-106(d) or 107(c), or adjusted Tier I feed rate screening limits under Subsections R315-266-106(e) or 107(e):

(I) Dispersion model and version used;

(II) Source of meteorological data;

(III) The dilution factor in micrograms per cubic meter per gram per second of emissions for the maximum annual average off-site, unless on-site is required, ground level concentration (MEI location); and

(IV) Indicate the MEI location on the map required under Subsection R315-266-103(b)(2)(v)(A)(5);

(vi) For facilities complying with the Tier II or III emissions rate controls for metals or HCl and Cl₂, a comparison of the estimated controlled emissions rates determined under Subsection R315-266-103(b)(2)(iv) with the allowable emission rates determined under Subsection R315-266-103(b)(2)(v);

(vii) For facilities complying with the Tier I, or adjusted Tier I, feed rate screening limits for metals or total chlorine and chlorine, a comparison of actual feed rates of each metal and total chlorine and chloride determined under Subsection R315-266-103(b)(2)(iii) to the Tier I allowable feed rates; and

(viii) For industrial furnaces that feed hazardous waste for any purpose other than solely as an ingredient, as defined by Subsection R315-266-103(a)(5)(ii), at any location other than the product discharge end of the device, documentation of compliance with the requirements of Subsections R315-266-103(a)(5)(i)(A), (B), and (C).

(ix) For industrial furnaces that recycle collected particulate matter (PM) back into the furnace and that will certify compliance with the metals emissions standards under Subsection R315-266-103(c)(3)(ii)(A):

(A) The applicable particulate matter standard in lb/hr; and

(B) The precompliance limit on the concentration of each metal in collected PM.

(3) Limits on operating conditions. The owner and operator shall establish limits on the following parameters consistent with the determinations made under Subsection R315-266-103(b)(2) and certify, under provisions of Subsection R315-266-103(b)(9), to the Director that the facility will operate within the limits during interim status when there is hazardous waste in the unit until revised certification of precompliance under Subsection R315-266-103(b)(8) or certification of compliance under Subsection R315-266-103(c):

(i) Feed rate of total hazardous waste and, unless complying with the Tier I or adjusted Tier I metals feed rate screening limits under Subsections R315-266-106(b) or (e), pumpable hazardous waste;

(ii) Feed rate of each metal in the following feed streams:

(A) Total feed streams, except that industrial furnaces that comply with the alternative metals implementation approach under Subsection R315-266-103(b)(4) shall specify limits on the concentration of each metal in collected particulate matter in lieu of feed rate limits for total feedstreams;

(B) Total hazardous waste feed, unless complying with the Tier I or Adjusted Tier I metals feed rate screening limits under Subsections R315-266-106(b) or (e); and

(C) Total pumpable hazardous waste feed, unless complying with the Tier I or adjusted Tier I metals feed rate screening limits under Subsections R315-266-106(b) or (e);

(iii) Total feed rate of chlorine and chloride in total feed streams;

(iv) Total feed rate of ash in total feed streams, except that the ash feed rate for cement kilns and light-weight aggregate kilns is not limited; and

(v) Maximum production rate of the device in appropriate units when producing normal product, unless complying with the Tier I or Adjusted Tier I feed rate screening limits for chlorine under Subsections R315-266-107(b)(1) or (e) and for all metals under Subsections R315-266-106(b) or (e), and the uncontrolled particulate emissions do not exceed the standard under Subsection R315-266-105.

(4) Operating requirements for furnaces that recycle PM. Owners and operators of furnaces that recycle collected particulate matter (PM) back into the furnace and that will certify compliance with the metals emissions controls under Subsection R315-266-103(c)(3)(ii)(A) shall comply with the special operating requirements provided in "Alternative Methodology for Implementing Metals Controls" in appendix IX of Rule R315-266.

(5) Measurement of feed rates and production rate

(i) General requirements. Limits on each of the parameters specified in Subsection R315-266-103(b)(3), except for limits on metals concentrations in collected particulate matter (PM) for industrial furnaces that recycle collected PM, shall be established and continuously monitored under either of the following methods:

(A) Instantaneous limits. A limit for a parameter may be established and continuously monitored and recorded on an instantaneous basis, i.e., the value that occurs at any time, not to be exceeded at any time; or

(B) Hourly rolling average limits. A limit for a parameter may be established and continuously monitored on an hourly rolling average basis defined as follows:

(I) A continuous monitor is one which continuously samples the regulated parameter without interruption, and evaluates the detector response at least once each 15 seconds, and computes and records the average value at least every 60 seconds.

(II) An hourly rolling average is the arithmetic mean of the 60 most recent 1-minute average values recorded by the continuous monitoring system.

(ii) Rolling average limits for carcinogenic metals and lead. Feed rate limits for the carcinogenic metals, arsenic, beryllium, cadmium, and chromium, and lead may be established either on an hourly rolling average basis as prescribed by Subsection R315-266-103(b)(5)(i)(B) or on, up to, a 24 hour rolling average basis. If the owner or operator elects to use an averaging period from 2 to 24 hours:

(A) The feed rate of each metal shall be limited at any time to ten times the feed rate that would be allowed on an hourly rolling average basis;

(B) The continuous monitor shall meet the following specifications:

(I) A continuous monitor is one which continuously samples the regulated parameter without interruption, and evaluates the detector response at least once each 15 seconds, and computes and records the average value at least every 60 seconds.

(II) The rolling average for the selected averaging period is defined as the arithmetic mean of one hour block averages for the averaging period. A one hour block average is the arithmetic mean of the one minute averages recorded during the 60-minute period beginning at one minute after the beginning of preceding clock hour.

(iii) Feed rate limits for metals, total chloride and chlorine, and ash. Feed rate limits for metals, total chlorine and chloride, and ash are established and monitored by knowing the concentration of the substance, i.e., metals, chloride/chlorine, and ash, in each feedstream and the flow rate of the feedstream. To monitor the feed rate of these substances, the flow rate of each feedstream shall be monitored under the continuous monitoring requirements of Subsections R315-266-103(b)(5)(i) and (ii).

(6) Public notice requirements at precompliance. On or before August 21, 1991 the owner or operator shall submit a notice with the following information for publication in a major local newspaper of general circulation and send a copy of the notice to the appropriate units of State and local government. The owner and operator shall provide to the Director with the certification of precompliance evidence of submitting the notice for publication. The notice, which shall be entitled "Notice of Certification of Precompliance with Hazardous Waste Burning Requirements of Subsection R315-266-103(b)", shall include:

(i) Name and address of the owner and operator of the facility as well as the location of the device burning hazardous waste;

(ii) Date that the certification of precompliance is submitted to the Director;

(iii) Brief description of the regulatory process required to

comply with the interim status requirements of Section R315-266-103 including required emissions testing to demonstrate conformance with emissions standards for organic compounds, particulate matter, metals, and HCl and Cl₂;

(iv) Types and quantities of hazardous waste burned including, but not limited to, source, whether solids or liquids, as well as an appropriate description of the waste;

(v) Type of device(s) in which the hazardous waste is burned including a physical description and maximum production rate of each device;

(vi) Types and quantities of other fuels and industrial furnace feedstocks fed to each unit;

(vii) Brief description of the basis for this certification of precompliance as specified in Subsection R315-266-103(b)(2);

(viii) Locations where the record for the facility can be viewed and copied by interested parties. These records and locations shall at a minimum include:

(A) The administrative record kept by the Agency office where the supporting documentation was submitted or another location designated by the Director; and

(B) The BIF correspondence file kept at the facility site where the device is located. The correspondence file shall include all correspondence between the facility and the Director and local regulatory officials, including copies of all certifications and notifications, such as the precompliance certification, precompliance public notice, notice of compliance testing, compliance test report, compliance certification, time extension requests and approvals or denials, enforcement notifications of violations, and copies of EPA and State site visit reports submitted to the owner or operator.

(ix) Notification of the establishment of a facility mailing list whereby interested parties shall notify the Director that they wish to be placed on the mailing list to receive future information and notices about this facility; and

(x) Location, mailing address, of the Division of Waste Management and Radiation Control, where further information can be obtained on regulation of hazardous waste burning.

(7) Monitoring other operating parameters. When the monitoring systems for the operating parameters listed in Subsections R315-266-103(c)(1)(v) through (xiii) are installed and operating in conformance with vendor specifications or, for CO, HC, and oxygen, specifications provided by appendix IX of Rule R315-266, as appropriate, the parameters shall be continuously monitored and records shall be maintained in the operating record.

(8) Revised certification of precompliance. The owner or operator may revise at any time the information and operating conditions documented under Subsections R315-266-103(b)(2) and (b)(3) in the certification of precompliance by submitting a revised certification of precompliance under procedures provided by Subsections R315-266-103(b)(2) and (b)(3).

(i) The public notice requirements of Subsection R315-266-103(b)(6) do not apply to recertifications.

(ii) The owner and operator shall operate the facility within the limits established for the operating parameters under Subsection R315-266-103(b)(3) until a revised certification is submitted under Subsection R315-266-103(b)(8) or a certification of compliance is submitted under Subsection R315-266-103(c).

(9) Certification of precompliance statement. The owner or operator shall include the following signed statement with the certification of precompliance submitted to the Director:

"I certify under penalty of law that this information was prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information and supporting documentation. Copies of all emissions tests, dispersion modeling results and other information used to determine conformance with the requirements of Subsection R315-266-

103(b) are available at the facility and can be obtained from the facility contact person listed above. Based on my inquiry of the person or persons who manages the facility, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I also acknowledge that the operating limits established in this certification pursuant to Subsections R315-266-103(b)(3) and (4) are enforceable limits at which the facility can legally operate during interim status until: (1) A revised certification of precompliance is submitted, (2) a certification of compliance is submitted, or (3) an operating permit is issued."

(c) Certification of compliance. The owner or operator shall conduct emissions testing to document compliance with the emissions standards of Subsections R315-266-104(b) through (e) and 103(a)(5)(i)(D) and Sections R315-266-105, 106, 107, and, under the procedures prescribed by Subsection R315-266-103(c), except under extensions of time provided by Subsection R315-266-103(c)(7). Based on the compliance test, the owner or operator shall submit to the Director on or before August 21, 1992 a complete and accurate "certification of compliance," under Subsection R315-266-103(c)(4), with those emission standards establishing limits on the operating parameters specified in Subsection R315-266-103(c)(1).

(1) Limits on operating conditions. The owner or operator shall establish limits on the following parameters based on operations during the compliance test, under procedures prescribed in Subsection R315-266-103(c)(4)(iv), or as otherwise specified and include these limits with the certification of compliance. The boiler or industrial furnace shall be operated in accordance with these operating limits and the applicable emissions standards of Subsections R315-266-104(b) through (e) and 103(a)(5)(i)(D) and Sections R315-266-105, 106, and 107, at all times when there is hazardous waste in the unit.

(i) Feed rate of total hazardous waste and, unless complying with the Tier I or adjusted Tier I metals feed rate screening limits under Subsection R315-266-106(b) or (e), pumpable hazardous waste;

(ii) Feed rate of each metal in the following feedstreams:

(A) Total feedstreams, except that:

(I) Facilities that comply with Tier I or Adjusted Tier I metals feed rate screening limits may set their operating limits at the metals feed rate screening limits determined under Subsections R315-266-106(b) or (e); and

(II) Industrial furnaces that shall comply with the alternative metals implementation approach under Subsection R315-266-103(c)(3)(ii) shall specify limits on the concentration of each metal in the collected particulate matter in lieu of feed rate limits for total feedstreams;

(B) Total hazardous waste feed, unless complying with the Tier I or Adjusted Tier I metals feed rate screening limits under Subsections R315-266-106(b) or (e); and

(C) Total pumpable hazardous waste feed, unless complying with the Tier I or Adjusted Tier I metals feed rate screening limits under Subsection R315-266-106(b) or (e);

(iii) Total feed rate of chlorine and chloride in total feed streams, except that facilities that comply with Tier I or Adjusted Tier I feed rate screening limits may set their operating limits at the total chlorine and chloride feed rate screening limits determined under Subsections R315-266-107(b)(1) or (e);

(iv) Total feed rate of ash in total feed streams, except that the ash feed rate for cement kilns and light-weight aggregate kilns is not limited;

(v) Carbon monoxide concentration, and where required, hydrocarbon concentration in stack gas. When complying with the CO controls of Subsection R315-266-104(b), the CO limit

is 100 ppmv, and when complying with the HC controls of Subsection R315-266-104(c), the HC limit is 20 ppmv. When complying with the CO controls of Subsection R315-266-104(c), the CO limit is established based on the compliance test;

(vi) Maximum production rate of the device in appropriate units when producing normal product, unless complying with the Tier I or Adjusted Tier I feed rate screening limits for chlorine under Subsections R315-266-107(b)(1) or (e) and for all metals under Subsections R315-266-106(b) or (e), and the uncontrolled particulate emissions do not exceed the standard under Section R315-266-105;

(vii) Maximum combustion chamber temperature where the temperature measurement is as close to the combustion zone as possible and is upstream of any quench water injection, unless complying with the Tier I or Adjusted Tier I metals feed rate screening limits under Subsections R315-266-106(b) or (e);

(viii) Maximum flue gas temperature entering a particulate matter control device, unless complying with Tier I or Adjusted Tier I metals feed rate screening limits under Subsections R315-266-106(b) or (e) and the total chlorine and chloride feed rate screening limits under Subsections R315-266-107(b) or (e);

(ix) For systems using wet scrubbers, including wet ionizing scrubbers, unless complying with the Tier I or Adjusted Tier I metals feed rate screening limits under Subsections R315-266-106(b) or (e) and the total chlorine and chloride feed rate screening limits under Subsections R315-266-107(b)(1) or (e):

(A) Minimum liquid to flue gas ratio;

(B) Minimum scrubber blowdown from the system or maximum suspended solids content of scrubber water; and

(C) Minimum pH level of the scrubber water;

(x) For systems using venturi scrubbers, the minimum differential gas pressure across the venture, unless complying with the Tier I or Adjusted Tier I metals feed rate screening limits under Subsections R315-266-106(b) or (e) and the total chlorine and chloride feed rate screening limits under Subsections R315-266-107(b)(1) or (e);

(xi) For systems using dry scrubbers, unless complying with the Tier I or Adjusted Tier I metals feed rate screening limits under Subsections R315-266-106(b) or (e) and the total chlorine and chloride feed rate screening limits under Subsections R315-266-107(b)(1) or (e):

(A) Minimum caustic feed rate; and

(B) Maximum flue gas flow rate;

(xii) For systems using wet ionizing scrubbers or electrostatic precipitators, unless complying with the Tier I or Adjusted Tier I metals feed rate screening limits under Subsections R315-266-106(b) or (e) and the total chlorine and chloride feed rate screening limits under Subsections R315-266-107(b)(1) or (e):

(A) Minimum electrical power in kilovolt amperes (kVA) to the precipitator plates; and

(B) Maximum flue gas flow rate;

(xiii) For systems using fabric filters (baghouses), the minimum pressure drop, unless complying with the Tier I or Adjusted Tier I metal feed rate screening limits under Subsections R315-266-106(b) or (e) and the total chlorine and chloride feed rate screening limits under Subsections R315-266-107(b)(1) or (e).

(2) Prior notice of compliance testing. At least 30 days prior to the compliance testing required by Subsection R315-266-103(c)(3), the owner or operator shall notify the Director and submit the following information:

(i) General facility information including:

(A) EPA facility ID number;

(B) Facility name, contact person, telephone number, and address;

(C) Person responsible for conducting compliance test, including company name, address, and telephone number, and a statement of qualifications;

(D) Planned date of the compliance test;
 (ii) Specific information on each device to be tested including:

(A) Description of boiler or industrial furnace;
 (B) A scaled plot plan showing the entire facility and location of the boiler or industrial furnace;
 (C) A description of the air pollution control system;
 (D) Identification of the continuous emission monitors that are installed, including:

(I) Carbon monoxide monitor;
 (II) Oxygen monitor;
 (III) Hydrocarbon monitor, specifying the minimum temperature of the system and, if the temperature is less than 150 °C, an explanation of why a heated system is not used, see Subsection R315-266-103(c)(5), and a brief description of the sample gas conditioning system;

(E) Indication of whether the stack is shared with another device that will be in operation during the compliance test;

(F) Other information useful to an understanding of the system design or operation.

(iii) Information on the testing planned, including a complete copy of the test protocol and Quality Assurance/Quality Control (QA/QC) plan, and a summary description for each test providing the following information at a minimum:

(A) Purpose of the test, e.g., demonstrate compliance with emissions of particulate matter; and

(B) Planned operating conditions, including levels for each pertinent parameter specified in Subsection R315-266-103(c)(1).

(3) Compliance testing

(i) General. Compliance testing shall be conducted under conditions for which the owner or operator has submitted a certification of precompliance under Subsection R315-266-103(b) and under conditions established in the notification of compliance testing required by Subsection R315-266-103(c)(2). The owner or operator may seek approval on a case-by-case basis to use compliance test data from one unit in lieu of testing a similar onsite unit. To support the request, the owner or operator shall provide a comparison of the hazardous waste burned and other feedstreams, and the design, operation, and maintenance of both the tested unit and the similar unit. The Director shall provide a written approval to use compliance test data in lieu of testing a similar unit if he finds that the hazardous wastes, the devices, and the operating conditions are sufficiently similar, and the data from the other compliance test is adequate to meet the requirements of Subsection R315-266-103(c).

(ii) Special requirements for industrial furnaces that recycle collected PM. Owners and operators of industrial furnaces that recycle back into the furnace particulate matter (PM) from the air pollution control system shall comply with one of the following procedures for testing to determine compliance with the metals standards of Subsections R315-266-106(c) or (d):

(A) The special testing requirements prescribed in "Alternative Method for Implementing Metals Controls" in appendix IX of Rule R315-266; or

(B) Stack emissions testing for a minimum of 6 hours each day while hazardous waste is burned during interim status. The testing shall be conducted when burning normal hazardous waste for that day at normal feed rates for that day and when the air pollution control system is operated under normal conditions. During interim status, hazardous waste analysis for metals content shall be sufficient for the owner or operator to determine if changes in metals content may affect the ability of the facility to meet the metals emissions standards established under Subsections R315-266-106(c) or (d). Under this option, operating limits, under Subsection R315-266-103(c)(1), shall be established during compliance testing under Subsection R315-

266-103(c)(3) only on the following parameters;

(I) Feed rate of total hazardous waste;
 (II) Total feed rate of chlorine and chloride in total feed streams;

(III) Total feed rate of ash in total feed streams, except that the ash feed rate for cement kilns and light-weight aggregate kilns is not limited;

(IV) Carbon monoxide concentration, and where required, hydrocarbon concentration in stack gas;

(V) Maximum production rate of the device in appropriate units when producing normal product; or

(C) Conduct compliance testing to determine compliance with the metals standards to establish limits on the operating parameters of Subsection R315-266-103(c)(1) only after the kiln system has been conditioned to enable it to reach equilibrium with respect to metals fed into the system and metals emissions. During conditioning, hazardous waste and raw materials having the same metals content as will be fed during the compliance test shall be fed at the feed rates that will be fed during the compliance test.

(iii) Conduct of compliance testing.

(A) If compliance with all applicable emissions standards of Sections R315-266-104 through 107 is not demonstrated simultaneously during a set of test runs, the operating conditions of additional test runs required to demonstrate compliance with remaining emissions standards shall be as close as possible to the original operating conditions.

(B) Prior to obtaining test data for purposes of demonstrating compliance with the applicable emissions standards of Sections R315-266-104 through 107 or establishing limits on operating parameters under Section R315-266-103, the facility shall operate under compliance test conditions for a sufficient period to reach steady-state operations. Industrial furnaces that recycle collected particulate matter back into the furnace and that comply with Subsections R315-266-103(c)(3)(ii)(A) or (B), however, need not reach steady state conditions with respect to the flow of metals in the system prior to beginning compliance testing for metals.

(C) Compliance test data on the level of an operating parameter for which a limit shall be established in the certification of compliance shall be obtained during emissions sampling for the pollutant(s), i.e., metals, PM, HCl/Cl₂, organic compounds, for which the parameter shall be established as specified by Subsection R315-266-103(c)(1).

(4) Certification of compliance. Within 90 days of completing compliance testing, the owner or operator shall certify to the Director compliance with the emissions standards of Subsections R315-266-104 (b), (c), and (e), and Sections R315-266-105, 106, and 107, and Subsection R315-266-103(a)(5)(i)(D). The certification of compliance shall include the following information:

(i) General facility and testing information including:

(A) EPA facility ID number;
 (B) Facility name, contact person, telephone number, and address;

(C) Person responsible for conducting compliance testing, including company name, address, and telephone number, and a statement of qualifications;

(D) Date(s) of each compliance test;

(E) Description of boiler or industrial furnace tested;

(F) Person responsible for quality assurance/quality control (QA/QC), title, and telephone number, and statement that procedures prescribed in the QA/QC plan submitted under Subsection R315-266-103(c)(2)(iii) have been followed, or a description of any changes and an explanation of why changes were necessary.

(G) Description of any changes in the unit configuration prior to or during testing that would alter any of the information submitted in the prior notice of compliance testing under

Subsection R315-266-103(c)(2), and an explanation of why the changes were necessary;

(H) Description of any changes in the planned test conditions prior to or during the testing that alter any of the information submitted in the prior notice of compliance testing under Subsection R315-266-103(c)(2), and an explanation of why the changes were necessary; and

(I) The complete report on results of emissions testing.

(ii) Specific information on each test including:

(A) Purpose(s) of test, e.g., demonstrate conformance with the emissions limits for particulate matter, metals, HCl, Cl₂, and CO;

(B) Summary of test results for each run and for each test including the following information:

(I) Date of run;

(II) Duration of run;

(III) Time-weighted average and highest hourly rolling average CO level for each run and for the test;

(IV) Highest hourly rolling average HC level, if HC monitoring is required for each run and for the test;

(V) If dioxin and furan testing is required under Subsection R315-266-104(e), time-weighted average emissions for each run and for the test of chlorinated dioxin and furan emissions, and the predicted maximum annual average ground level concentration of the toxicity equivalency factor;

(VI) Time-weighted average particulate matter emissions for each run and for the test;

(VII) Time-weighted average HCl and Cl₂ emissions for each run and for the test;

(VIII) Time-weighted average emissions for the metals subject to regulation under Subsection R315-266-106 for each run and for the test; and

(IX) QA/QC results.

(iii) Comparison of the actual emissions during each test with the emissions limits prescribed by Subsections R315-266-104(b), (c), and (e), and Sections R315-266-105, through 107 and established for the facility in the certification of precompliance under Subsection R315-266-103(b).

(iv) Determination of operating limits based on all valid runs of the compliance test for each applicable parameter listed in Subsection R315-266-103(c)(1) using either of the following procedures:

(A) Instantaneous limits. A parameter may be measured and recorded on an instantaneous basis, i.e., the value that occurs at any time, and the operating limit specified as the time-weighted average during all runs of the compliance test; or

(B) Hourly rolling average basis. The limit for a parameter may be established and continuously monitored on an hourly rolling average basis defined as follows:

(I) A continuous monitor is one which continuously samples the regulated parameter without interruption, and evaluates the detector response at least once each 15 seconds, and computes and records the average value at least every 60 seconds; and

(II) An hourly rolling average is the arithmetic mean of the 60 most recent 1-minute average values recorded by the continuous monitoring system.

(III) The operating limit for the parameter shall be established based on compliance test data as the average over all test runs of the highest hourly rolling average value for each run.

(C) Rolling average limits for carcinogenic metals and lead. Feed rate limits for the carcinogenic metals, i.e., arsenic, beryllium, cadmium and chromium, and lead may be established either on an hourly rolling average basis as prescribed by Subsection R315-266-103(c)(4)(iv)(B) or on, up to, a 24 hour rolling average basis. If the owner or operator elects to use an averaging period from 2 to 24 hours:

(I) The feed rate of each metal shall be limited at any time to ten times the feed rate that would be allowed on an hourly

rolling average basis;

(II) The continuous monitor shall meet the following specifications:

(i) A continuous monitor is one which continuously samples the regulated parameter without interruption, and evaluates the detector response at least once each 15 seconds, and computes and records the average value at least every 60 seconds.

(ii) The rolling average for the selected averaging period is defined as arithmetic mean of one hour block averages for the averaging period. A one hour block average is the arithmetic mean of the one minute averages recorded during the 60-minute period beginning at one minute after the beginning of preceding clock hour; and

(III) The operating limit for the feed rate of each metal shall be established based on compliance test data as the average over all test runs of the highest hourly rolling average feed rate for each run.

(D) Feed rate limits for metals, total chloride and chlorine, and ash. Feed rate limits for metals, total chlorine and chloride, and ash are established and monitored by knowing the concentration of the substance, i.e., metals, chloride/chlorine, and ash, in each feedstream and the flow rate of the feedstream. To monitor the feed rate of these substances, the flow rate of each feedstream shall be monitored under the continuous monitoring requirements of Subsections R315-266-103(c)(4)(iv)(A) through (C).

(v) Certification of compliance statement. The following statement shall accompany the certification of compliance:

"I certify under penalty of law that this information was prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information and supporting documentation. Copies of all emissions tests, dispersion modeling results and other information used to determine conformance with the requirements of Subsection R315-266-103(c) are available at the facility and can be obtained from the facility contact person listed above. Based on my inquiry of the person or persons who manages the facility, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I also acknowledge that the operating conditions established in this certification pursuant to Subsection R315-266-103(c)(4)(iv) are enforceable limits at which the facility can legally operate during interim status until a revised certification of compliance is submitted."

(5) Special requirements for HC monitoring systems. When an owner or operator is required to comply with the hydrocarbon (HC) controls provided by Subsections R315-266-104(c) or 103(a)(5)(i)(D), a conditioned gas monitoring system may be used in conformance with specifications provided in appendix IX of Rule R315-266 provided that the owner or operator submits a certification of compliance without using extensions of time provided by Subsection R315-266-103(c)(7).

(6) Special operating requirements for industrial furnaces that recycle collected PM. Owners and operators of industrial furnaces that recycle back into the furnace particulate matter (PM) from the air pollution control system shall:

(i) When complying with the requirements of Subsection R315-266-103(c)(3)(ii)(A), comply with the operating requirements prescribed in "Alternative Method to Implement the Metals Controls" in appendix IX of Rule R315-266; and

(ii) When complying with the requirements of Subsection R315-266-103(c)(3)(ii)(B), comply with the operating requirements prescribed by Subsection R315-266-103(c).

(7) Extensions of time.

(i) If the owner or operator does not submit a complete certification of compliance for all of the applicable emissions standards of Sections R315-266-104, through 107 by August 21, 1992, he/she shall either:

(A) Stop burning hazardous waste and begin closure activities under Subsection R315-266-103(l) for the hazardous waste portion of the facility; or

(B) Limit hazardous waste burning only for purposes of compliance testing, and pretesting to prepare for compliance testing, a total period of 720 hours for the period of time beginning August 21, 1992, submit a notification to the Director by August 21, 1992 stating that the facility is operating under restricted interim status and intends to resume burning hazardous waste, and submit a complete certification of compliance by August 23, 1993; or

(C) Obtain a case-by-case extension of time under Subsection R315-266-103(c)(7)(ii).

(ii) The owner or operator may request a case-by-case extension of time to extend any time limit provided by Subsection R315-266-103(c) if compliance with the time limit is not practicable for reasons beyond the control of the owner or operator.

(A) In granting an extension, the Director may apply conditions as the facts warrant to ensure timely compliance with the requirements of Section R315-266-103 and that the facility operates in a manner that does not pose a hazard to human health and the environment;

(B) When an owner or operator requests an extension of time to enable the facility to comply with the alternative hydrocarbon provisions of Subsection R315-266-104(f) and obtain a RCRA operating permit because the facility cannot meet the HC limit of Subsection R315-266-104(c):

(1) The Director shall, in considering whether to grant the extension:

(i) Determine whether the owner and operator have submitted in a timely manner a complete part B permit application that includes information required under Subsection R315-270-22(b); and

(ii) Consider whether the owner and operator have made a good faith effort to certify compliance with all other emission controls, including the controls on dioxins and furans of Subsection R315-266-104(e) and the controls on PM, metals, and HCl/Cl₂.

(2) If an extension is granted, the Director shall, as a condition of the extension, require the facility to operate under flue gas concentration limits on CO and HC that, based on available information, including information in the part B permit application, are baseline CO and HC levels as defined by Subsection R315-266-104(f)(1).

(8) Revised certification of compliance. The owner or operator may submit at any time a revised certification of compliance, recertification of compliance, under the following procedures:

(i) Prior to submittal of a revised certification of compliance, hazardous waste may not be burned for more than a total of 720 hours under operating conditions that exceed those established under a current certification of compliance, and such burning may be conducted only for purposes of determining whether the facility can operate under revised conditions and continue to meet the applicable emissions standards of Sections R315-266-104 through 107;

(ii) At least 30 days prior to first burning hazardous waste under operating conditions that exceed those established under a current certification of compliance, the owner or operator shall notify the Director and submit the following information:

(A) EPA facility ID number, and facility name, contact person, telephone number, and address;

(B) Operating conditions that the owner or operator is seeking to revise and description of the changes in facility

design or operation that prompted the need to seek to revise the operating conditions;

(C) A determination that when operating under the revised operating conditions, the applicable emissions standards of Sections R315-266-104 through 107 are not likely to be exceeded. To document this determination, the owner or operator shall submit the applicable information required under Subsection R315-266-103(b)(2); and

(D) Complete emissions testing protocol for any pretesting and for a new compliance test to determine compliance with the applicable emissions standards of Sections R315-266-104 through 107 when operating under revised operating conditions. The protocol shall include a schedule of pre-testing and compliance testing. If the owner and operator revises the scheduled date for the compliance test, he/she shall notify the Director in writing at least 30 days prior to the revised date of the compliance test;

(iii) Conduct a compliance test under the revised operating conditions and the protocol submitted to the Director to determine compliance with the applicable emissions standards of Sections R315-266-104 through 107; and

(iv) Submit a revised certification of compliance under Subsection R315-266-103(c)(4).

(d) Periodic Recertifications. The owner or operator shall conduct compliance testing and submit to the Director a recertification of compliance under provisions of Subsection R315-266-103(c) within five years from submitting the previous certification or recertification. If the owner or operator seeks to recertify compliance under new operating conditions, he/she shall comply with the requirements of Subsection R315-266-103(c)(8).

(e) Noncompliance with certification schedule. If the owner or operator does not comply with the interim status compliance schedule provided by Subsections R315-266-103(b), (c), and (d), hazardous waste burning shall terminate on the date that the deadline is missed, closure activities shall begin under Subsection R315-266-103(l), and hazardous waste burning may not resume except under an operating permit issued under Section R315-270-66. For purposes of compliance with the closure provisions of Subsection R315-266-103(l) and 40 CFR 265.112(d)(2) and 113, which are adopted by reference, the boiler or industrial furnace has received "the known final volume of hazardous waste" on the date that the deadline is missed.

(f) Start-up and shut-down. Hazardous waste, except waste fed solely as an ingredient under the Tier I, or adjusted Tier I, feed rate screening limits for metals and chloride/chlorine, shall not be fed into the device during start-up and shut-down of the boiler or industrial furnace, unless the device is operating within the conditions of operation specified in the certification of compliance.

(g) Automatic waste feed cutoff. During the compliance test required by Subsection R315-266-103(c)(3), and upon certification of compliance under Subsection R315-266-103(c), a boiler or industrial furnace shall be operated with a functioning system that automatically cuts off the hazardous waste feed when the applicable operating conditions specified in Subsections R315-266-103(c)(1)(i) and (v) through (xiii) deviate from those established in the certification of compliance. In addition:

(1) To minimize emissions of organic compounds, the minimum combustion chamber temperature, or the indicator of combustion chamber temperature, that occurred during the compliance test shall be maintained while hazardous waste or hazardous waste residues remain in the combustion chamber, with the minimum temperature during the compliance test defined as either:

(i) If compliance with the combustion chamber temperature limit is based on an hourly rolling average, the

minimum temperature during the compliance test is considered to be the average over all runs of the lowest hourly rolling average for each run; or

(ii) If compliance with the combustion chamber temperature limit is based on an instantaneous temperature measurement, the minimum temperature during the compliance test is considered to be the time-weighted average temperature during all runs of the test; and

(2) Operating parameters limited by the certification of compliance shall continue to be monitored during the cutoff, and the hazardous waste feed shall not be restarted until the levels of those parameters comply with the limits established in the certification of compliance.

(h) Fugitive emissions. Fugitive emissions shall be controlled by:

(1) Keeping the combustion zone totally sealed against fugitive emissions; or

(2) Maintaining the combustion zone pressure lower than atmospheric pressure; or

(3) An alternate means of control that the owner or operator can demonstrate provide fugitive emissions control equivalent to maintenance of combustion zone pressure lower than atmospheric pressure. Support for such demonstration shall be included in the operating record.

(i) Changes. A boiler or industrial furnace shall cease burning hazardous waste when changes in combustion properties, or feed rates of the hazardous waste, other fuels, or industrial furnace feedstocks, or changes in the boiler or industrial furnace design or operating conditions deviate from the limits specified in the certification of compliance.

(j) Monitoring and Inspections.

(1) The owner or operator shall monitor and record the following, at a minimum, while burning hazardous waste:

(i) Feed rates and composition of hazardous waste, other fuels, and industrial furnace feed stocks, and feed rates of ash, metals, and total chloride and chlorine as necessary to ensure conformance with the certification of precompliance or certification of compliance;

(ii) Carbon monoxide (CO), oxygen, and if applicable, hydrocarbons (HC), on a continuous basis at a common point in the boiler or industrial furnace downstream of the combustion zone and prior to release of stack gases to the atmosphere in accordance with the operating limits specified in the certification of compliance. CO, HC, and oxygen monitors shall be installed, operated, and maintained in accordance with methods specified in appendix IX of Rule R315-266.

(iii) Upon the request of the Director, sampling and analysis of the hazardous waste, and other fuels and industrial furnace feed stocks as appropriate, and the stack gas emissions shall be conducted to verify that the operating conditions established in the certification of precompliance or certification of compliance achieve the applicable standards of Sections R315-266-104 through 107.

(2) The boiler or industrial furnace and associated equipment, pumps, valves, pipes, fuel storage tanks, etc., shall be subjected to thorough visual inspection when they contain hazardous waste, at least daily for leaks, spills, fugitive emissions, and signs of tampering.

(3) The automatic hazardous waste feed cutoff system and associated alarms shall be tested at least once every 7 days when hazardous waste is burned to verify operability, unless the owner or operator can demonstrate that weekly inspections will unduly restrict or upset operations and that less frequent inspections will be adequate. Support for such demonstration shall be included in the operating record. At a minimum, operational testing shall be conducted at least once every 30 days.

(4) These monitoring and inspection data shall be recorded and the records shall be placed in the operating log.

(k) Recordkeeping. The owner or operator shall keep in the operating record of the facility all information and data required by Section R315-266-103 for five years.

(l) Closure. At closure, the owner or operator shall remove all hazardous waste and hazardous waste residues, including, but not limited to, ash, scrubber waters, and scrubber sludges, from the boiler or industrial furnace and shall comply with 40 CFR 265.111 through 115, which are adopted by reference.

R315-266-104. Hazardous Waste Burned in Boilers and Industrial Furnaces -- Standards to Control Organic Emissions.

(a) DRE standard

(1) General. Except as provided in Subsection R315-266-104(a)(3), a boiler or industrial furnace burning hazardous waste shall achieve a destruction and removal efficiency (DRE) of 99.99% for all organic hazardous constituents in the waste feed. To demonstrate conformance with this requirement, 99.99% DRE shall be demonstrated during a trial burn for each principal organic hazardous constituent (POHC) designated, under Subsection R315-266-104(a)(2), in its permit for each waste feed. DRE is determined for each POHC from the following equation:

$$DRE = (1 - W_{out}/W_{in}) \times 100$$

where:

W_{in} = Mass feed rate of one principal organic hazardous constituent (POHC) in the hazardous waste fired to the boiler or industrial furnace; and

W_{out} = Mass emission rate of the same POHC present in stack gas prior to release to the atmosphere.

(2) Designation of POHCs. Principal organic hazardous constituents (POHCs) are those compounds for which compliance with the DRE requirements of Section R315-266-104 shall be demonstrated in a trial burn in conformance with procedures prescribed in Section R315-270-66. One or more POHCs shall be designated by the Director for each waste feed to be burned. POHCs shall be designated based on the degree of difficulty of destruction of the organic constituents in the waste and on their concentrations or mass in the waste feed considering the results of waste analyses submitted with part B of the permit application. POHCs are most likely to be selected from among those compounds listed in Rule R315-261, appendix VIII that are also present in the normal waste feed. However, if the applicant demonstrates to the Director's satisfaction that a compound not listed in Rule R315-261, appendix VIII or not present in the normal waste feed is a suitable indicator of compliance with the DRE requirements of Section R315-266-104, that compound may be designated as a POHC. Such POHCs need not be toxic or organic compounds.

(3) Dioxin-listed waste. A boiler or industrial furnace burning hazardous waste containing, or derived from, EPA Hazardous Wastes Nos. F020, F021, F022, F023, F026, or F027 shall achieve a destruction and removal efficiency (DRE) of 99.9999% for each POHC designated, under Subsection R315-266-104(a)(2), in its permit. This performance shall be demonstrated on POHCs that are more difficult to burn than tetra-, penta-, and hexachlorodibenzo-p-dioxins and dibenzofurans. DRE is determined for each POHC from the equation in Subsection R315-266-104(a)(1). In addition, the owner or operator of the boiler or industrial furnace shall notify the Director of intent to burn EPA Hazardous Waste Nos. F020, F021, F022, F023, F026, or F027.

(4) Automatic waiver of DRE trial burn. Owners and operators of boilers operated under the special operating requirements provided by Section R315-266-110 are considered to be in compliance with the DRE standard of Subsection R315-266-104(a)(1) and are exempt from the DRE trial burn.

(5) Low risk waste. Owners and operators of boilers or

industrial furnaces that burn hazardous waste in compliance with the requirements of Subsection R315-266-109(a) are considered to be in compliance with the DRE standard of Subsection R315-266-104(a)(1) and are exempt from the DRE trial burn.

(b) Carbon monoxide standard.

(1) Except as provided in Subsection R315-266-104(c), the stack gas concentration of carbon monoxide (CO) from a boiler or industrial furnace burning hazardous waste cannot exceed 100 ppmv on an hourly rolling average basis, i.e., over any 60 minute period, continuously corrected to 7 percent oxygen, dry gas basis.

(2) CO and oxygen shall be continuously monitored in conformance with "Performance Specifications for Continuous Emission Monitoring of Carbon Monoxide and Oxygen for Incinerators, Boilers, and Industrial Furnaces Burning Hazardous Waste" in appendix IX of Rule R315-266.

(3) Compliance with the 100 ppmv CO limit shall be demonstrated during the trial burn, for new facilities or an interim status facility applying for a permit, or the compliance test, for interim status facilities. To demonstrate compliance, the highest hourly rolling average CO level during any valid run of the trial burn or compliance test shall not exceed 100 ppmv.

(c) Alternative carbon monoxide standard.

(1) The stack gas concentration of carbon monoxide (CO) from a boiler or industrial furnace burning hazardous waste may exceed the 100 ppmv limit provided that stack gas concentrations of hydrocarbons (HC) do not exceed 20 ppmv, except as provided by Subsection R315-266-104(f) for certain industrial furnaces.

(2) HC limits shall be established under Section R315-266-104 on an hourly rolling average basis, i.e., over any 60 minute period, reported as propane, and continuously corrected to 7 percent oxygen, dry gas basis.

(3) HC shall be continuously monitored in conformance with "Performance Specifications for Continuous Emission Monitoring of Hydrocarbons for Incinerators, Boilers, and Industrial Furnaces Burning Hazardous Waste" in appendix IX of Rule R315-266. CO and oxygen shall be continuously monitored in conformance with Subsection R315-266-104(b)(2).

(4) The alternative CO standard is established based on CO data during the trial burn, for a new facility, and the compliance test, for an interim status facility. The alternative CO standard is the average over all valid runs of the highest hourly average CO level for each run. The CO limit is implemented on an hourly rolling average basis, and continuously corrected to 7 percent oxygen, dry gas basis.

(d) Special requirements for furnaces. Owners and operators of industrial furnaces, e.g., kilns or cupolas, that feed hazardous waste for a purpose other than solely as an ingredient, see Section R315-266-103(a)(5)(ii), at any location other than the end where products are normally discharged and where fuels are normally fired shall comply with the hydrocarbon limits provided by Subsections R315-266-104(c) or (f) irrespective of whether stack gas CO concentrations meet the 100 ppmv limit of Subsection R315-266-104(b).

(e) Controls for dioxins and furans. Owners and operators of boilers and industrial furnaces that are equipped with a dry particulate matter control device that operates within the temperature range of 450-750 °F, and industrial furnaces operating under an alternative hydrocarbon limit established under Subsection R315-266-104(f) shall conduct a site-specific risk assessment as follows to demonstrate that emissions of chlorinated dibenzo-p-dioxins and dibenzofurans do not result in an increased lifetime cancer risk to the hypothetical maximum exposed individual (MEI) exceeding 1 in 100,000:

(1) During the trial burn, for new facilities or an interim status facility applying for a permit, or compliance test, for

interim status facilities, determine emission rates of the tetra-octa congeners of chlorinated dibenzo-p-dioxins and dibenzofurans (CDDs/CDFs) using Method 0023A, Sampling Method for Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans Emissions from Stationary Sources, EPA Publication SW-846, as incorporated by reference in Section R315-260-11.

(2) Estimate the 2,3,7,8-TCDD toxicity equivalence of the tetra-octa CDDs/CDFs congeners using "Procedures for Estimating the Toxicity Equivalence of Chlorinated Dibenzo-p-Dioxin and Dibenzofuran Congeners" in appendix IX of Rule R315-266. Multiply the emission rates of CDD/CDF congeners with a toxicity equivalence greater than zero, see the procedure, by the calculated toxicity equivalence factor to estimate the equivalent emission rate of 2,3,7,8-TCDD;

(3) Conduct dispersion modeling using methods recommended in appendix W of 40 CFR 51 ("Guideline on Air Quality Models (Revised)" (1986) and its supplements), the "Hazardous Waste Combustion Air Quality Screening Procedure", provided in appendix IX of Rule R315-266, or in Screening Procedures for Estimating the Air Quality Impact of Stationary Sources, Revised, incorporated by reference in R315-260-11, to predict the maximum annual average off-site ground level concentration of 2,3,7,8-TCDD equivalents determined under Subsection R315-266-104(e)(2). The maximum annual average concentration shall be used when a person resides on-site; and

(4) The ratio of the predicted maximum annual average ground level concentration of 2,3,7,8-TCDD equivalents to the risk-specific dose for 2,3,7,8-TCDD provided in appendix V of Rule R315-266, 2.2×10^{-7} , shall not exceed 1.0.

(f) Monitoring CO and HC in the by-pass duct of a cement kiln. Cement kilns may comply with the carbon monoxide and hydrocarbon limits provided by Subsections R315-266-104(b), (c), and (d) by monitoring in the by-pass duct provided that:

(1) Hazardous waste is fired only into the kiln and not at any location downstream from the kiln exit relative to the direction of gas flow; and

(2) The by-pass duct diverts a minimum of 10% of kiln off-gas into the duct.

(g) Use of emissions test data to demonstrate compliance and establish operating limits. Compliance with the requirements of Section R315-266-104 shall be demonstrated simultaneously by emissions testing or during separate runs under identical operating conditions. Further, data to demonstrate compliance with the CO and HC limits of Section R315-266-104 or to establish alternative CO or HC limits under Section R315-266-104 shall be obtained during the time that DRE testing, and where applicable, CDD/CDF testing under Subsection R315-266-104(e) and comprehensive organic emissions testing under Subsection R315-266-104(f) is conducted.

(h) Enforcement. For the purposes of permit enforcement, compliance with the operating requirements specified in the permit, under Section R315-266-102, shall be regarded as compliance with Section R315-266-104. However, evidence that compliance with those permit conditions is insufficient to ensure compliance with the requirements of Section R315-266-104 may be "information" justifying modification or revocation and re-issuance of a permit under Section R315-270-41.

R315-266-105. Hazardous Waste Burned in Boilers and Industrial Furnaces -- Standards to Control Particulate Matter.

(a) A boiler or industrial furnace burning hazardous waste may not emit particulate matter in excess of 180 milligrams per dry standard cubic meter, 0.08 grains per dry standard cubic foot, after correction to a stack gas concentration of 7% oxygen, using procedures prescribed in 40 CFR part 60, appendix A,

methods 1 through 5, and appendix IX of Rule R315-266.

(b) An owner or operator meeting the requirements of Subsection Rule R315-266-109(b) for the low risk waste exemption is exempt from the particulate matter standard.

(c) Oxygen correction.

(1) Measured pollutant levels shall be corrected for the amount of oxygen in the stack gas according to the formula:

$$P_c = P_m \times 14 / (E - Y)$$

Where:

P_c is the corrected concentration of the pollutant in the stack gas, P_m is the measured concentration of the pollutant in the stack gas, E is the oxygen concentration on a dry basis in the combustion air fed to the device, and Y is the measured oxygen concentration on a dry basis in the stack.

(2) For devices that feed normal combustion air, E will equal 21 percent. For devices that feed oxygen-enriched air for combustion, that is, air with an oxygen concentration exceeding 21 percent, the value of E will be the concentration of oxygen in the enriched air.

(3) Compliance with all emission standards provided by Sections R315-266-100 through 112 shall be based on correcting to 7 percent oxygen using this procedure.

(d) For the purposes of permit enforcement, compliance with the operating requirements specified in the permit, under Section R315-266-102, shall be regarded as compliance with Section R315-266-105. However, evidence that compliance with those permit conditions is insufficient to ensure compliance with the requirements of Section R315-266-105 may be "information" justifying modification or revocation and re-issuance of a permit under Section R315-270-41.

R315-266-106. Hazardous Waste Burned in Boilers and Industrial Furnaces -- Standards to Control Metals Emissions.

(a) General. The owner or operator shall comply with the metals standards provided by Subsections R315-266-106(b), (c), (d), (e), or (f) for each metal listed in Subsection R315-266-106(b) that is present in the hazardous waste at detectable levels by using appropriate analytical procedures.

(b) Tier I feed rate screening limits. Feed rate screening limits for metals are specified in appendix I of Rule R315-266 as a function of terrain-adjusted effective stack height and terrain and land use in the vicinity of the facility. Criteria for facilities that are not eligible to comply with the screening limits are provided in Subsection R315-266-106(b)(7).

(1) Noncarcinogenic metals. The feed rates of antimony, barium, lead, mercury, thallium, and silver in all feed streams, including hazardous waste, fuels, and industrial furnace feed stocks shall not exceed the screening limits specified in appendix I of Rule R315-266.

(i) The feed rate screening limits for antimony, barium, mercury, thallium, and silver are based on either:

(A) An hourly rolling average as defined in Subsection R315-266-102(e)(6)(i)(B); or

(B) An instantaneous limit not to be exceeded at any time.

(ii) The feed rate screening limit for lead is based on one of the following:

(A) An hourly rolling average as defined in Subsection R315-266-102(e)(6)(i)(B);

(B) An averaging period of 2 to 24 hours as defined in Subsection R315-266-102(e)(6)(ii) with an instantaneous feed rate limit not to exceed 10 times the feed rate that would be allowed on an hourly rolling average basis; or

(C) An instantaneous limit not to be exceeded at any time.

(2) Carcinogenic metals.

(i) The feed rates of arsenic, cadmium, beryllium, and chromium in all feed streams, including hazardous waste, fuels, and industrial furnace feed stocks shall not exceed values derived from the screening limits specified in appendix I of Rule

R315-266. The feed rate of each of these metals is limited to a level such that the sum of the ratios of the actual feed rate to the feed rate screening limit specified in appendix I shall not exceed 1.0, as provided by the following equation:

The summation of $AFR_{(i)} / FRSL_{(i)}$ for $i = 1$ to n is less than or equal to 1.0

where:

n = number of carcinogenic metals

AFR = actual feed rate to the device for metal "i"

$FRSL$ = feed rate screening limit provided by appendix I of Rule R315-266 for metal "i".

(ii) The feed rate screening limits for the carcinogenic metals are based on either:

(A) An hourly rolling average; or

(B) An averaging period of 2 to 24 hours as defined in Subsection R315-266-102(e)(6)(ii) with an instantaneous feed rate limit not to exceed 10 times the feed rate that would be allowed on an hourly rolling average basis.

(3) TESH.

(i) The terrain-adjusted effective stack height is determined according to the following equation:

$$TESH = Ha + H1 - Tr$$

where:

Ha = Actual physical stack height

$H1$ = Plume rise as determined from appendix VI of Rule R315-266 as a function of stack flow rate and stack gas exhaust temperature.

Tr = Terrain rise within five kilometers of the stack.

(ii) The stack height (Ha) may not exceed good engineering practice as specified in 40 CFR 51.100(ii).

(iii) If the TESH for a particular facility is not listed in the table in the appendices, the nearest lower TESH listed in the table shall be used. If the TESH is four meters or less, a value of four meters shall be used.

(4) Terrain type. The screening limits are a function of whether the facility is located in noncomplex or complex terrain. A device located where any part of the surrounding terrain within 5 kilometers of the stack equals or exceeds the elevation of the physical stack height (Ha) is considered to be in complex terrain and the screening limits for complex terrain apply. Terrain measurements are to be made from U.S. Geological Survey 7.5-minute topographic maps of the area surrounding the facility.

(5) Land use. The screening limits are a function of whether the facility is located in an area where the land use is urban or rural. To determine whether land use in the vicinity of the facility is urban or rural, procedures provided in appendices IX or X of Rule R315-266 shall be used.

(6) Multiple stacks. Owners and operators of facilities with more than one on-site stack from a boiler, industrial furnace, incinerator, or other thermal treatment unit subject to controls of metals emissions under a RCRA operating permit or interim status controls shall comply with the screening limits for all such units assuming all hazardous waste is fed into the device with the worst-case stack based on dispersion characteristics. The worst-case stack is determined from the following equation as applied to each stack:

$$K = HVT$$

Where:

K = a parameter accounting for relative influence of stack height and plume rise;

H = physical stack height (meters);

V = stack gas flow rate (m³/second); and

T = exhaust temperature (deg. K).

The stack with the lowest value of K is the worst-case stack.

(7) Criteria for facilities not eligible for screening limits. If any criteria below are met, the Tier I and Tier II screening limits do not apply. Owners and operators of such facilities

shall comply with either the Tier III standards provided by Subsection R315-266-106(d) or with the adjusted Tier I feed rate screening limits provided by Subsection R315-266-106(e).

(i) The device is located in a narrow valley less than one kilometer wide;

(ii) The device has a stack taller than 20 meters and is located such that the terrain rises to the physical height within one kilometer of the facility;

(iii) The device has a stack taller than 20 meters and is located within five kilometers of a shoreline of a large body of water such as an ocean or large lake;

(iv) The physical stack height of any stack is less than 2.5 times the height of any building within five building heights or five projected building widths of the stack and the distance from the stack to the closest boundary is within five building heights or five projected building widths of the associated building; or

(v) The Director determines that standards based on site-specific dispersion modeling are required.

(8) Implementation. The feed rate of metals in each feedstream shall be monitored to ensure that the feed rate screening limits are not exceeded.

(c) Tier II emission rate screening limits. Emission rate screening limits are specified in appendix I as a function of terrain-adjusted effective stack height and terrain and land use in the vicinity of the facility. Criteria for facilities that are not eligible to comply with the screening limits are provided in Subsection R315-266-106(b)(7).

(1) Noncarcinogenic metals. The emission rates of antimony, barium, lead, mercury, thallium, and silver shall not exceed the screening limits specified in appendix I of Rule R315-266.

(2) Carcinogenic metals. The emission rates of arsenic, cadmium, beryllium, and chromium shall not exceed values derived from the screening limits specified in appendix I of Rule R315-266. The emission rate of each of these metals is limited to a level such that the sum of the ratios of the actual emission rate to the emission rate screening limit specified in appendix I shall not exceed 1.0, as provided by the following equation:

The summation of $AER_{(i)}/ERSL_{(i)}$ for $i = 1$ to n is less than or equal to 1.0

where:

n = number of carcinogenic metals

AER = actual emission rate for metal "i"

ERSL = emission rate screening limit provided by appendix I of Rule R315-266 for metal "i".

(3) Implementation. The emission rate limits shall be implemented by limiting feed rates of the individual metals to levels during the trial burn, for new facilities or an interim status facility applying for a permit, or the compliance test, for interim status facilities. The feed rate averaging periods are the same as provided by Subsections R315-266-106(b)(1)(i) and (ii) and (b)(2)(ii). The feed rate of metals in each feedstream shall be monitored to ensure that the feed rate limits for the feedstreams specified under Sections R315-266-102 or 103 are not exceeded.

(4) Definitions and limitations. The definitions and limitations provided by Subsection R315-266-106(b) for the following terms also apply to the Tier II emission rate screening limits provided by Subsection R315-266-106(c): terrain-adjusted effective stack height, good engineering practice stack height, terrain type, land use, and criteria for facilities not eligible to use the screening limits.

(5) Multiple stacks.

(i) Owners and operators of facilities with more than one onsite stack from a boiler, industrial furnace, incinerator, or other thermal treatment unit subject to controls on metals emissions under a RCRA operating permit or interim status controls shall comply with the emissions screening limits for any such stacks assuming all hazardous waste is fed into the device

with the worst-case stack based on dispersion characteristics.

(ii) The worst-case stack is determined by procedures provided in Subsection R315-266-106(b)(6).

(iii) For each metal, the total emissions of the metal from those stacks shall not exceed the screening limit for the worst-case stack.

(d) Tier III and Adjusted Tier I site-specific risk assessment. The requirements of Subsection R315-266-106(d) apply to facilities complying with either the Tier III or Adjusted Tier I controls, except where specified otherwise.

(1) General. Conformance with the Tier III metals controls shall be demonstrated by emissions testing to determine the emission rate for each metal. In addition, conformance with either the Tier III or Adjusted Tier I metals controls shall be demonstrated by air dispersion modeling to predict the maximum annual average off-site ground level concentration for each metal, and a demonstration that acceptable ambient levels are not exceeded.

(2) Acceptable ambient levels. Appendices IV and V of Rule R315-266 list the acceptable ambient levels for purposes of Rule R315-266. Reference air concentrations (RACs) are listed for the noncarcinogenic metals and 10-5 risk-specific doses (RSDs) are listed for the carcinogenic metals. The RSD for a metal is the acceptable ambient level for that metal provided that only one of the four carcinogenic metals is emitted. If more than one carcinogenic metal is emitted, the acceptable ambient level for the carcinogenic metals is a fraction of the RSD as described in Subsection R315-266-106(d)(3).

(3) Carcinogenic metals. For the carcinogenic metals, arsenic, cadmium, beryllium, and chromium, the sum of the ratios of the predicted maximum annual average off-site ground level concentrations, except that on-site concentrations shall be considered if a person resides on site, to the risk-specific dose (RSD) for all carcinogenic metals emitted shall not exceed 1.0 as determined by the following equation:

The summation of Predicted Ambient Concentration_(i)/Risk-Specific Dose_(i) for $i = 1$ to n is less than or equal to 1.0

where: n = number of carcinogenic metals

(4) Noncarcinogenic metals. For the noncarcinogenic metals, the predicted maximum annual average off-site ground level concentration for each metal shall not exceed the reference air concentration (RAC).

(5) Multiple stacks. Owners and operators of facilities with more than one on-site stack from a boiler, industrial furnace, incinerator, or other thermal treatment unit subject to controls on metals emissions under a RCRA operating permit or interim status controls shall conduct emissions testing, except that facilities complying with Adjusted Tier I controls need not conduct emissions testing, and dispersion modeling to demonstrate that the aggregate emissions from all such on-site stacks do not result in an exceedance of the acceptable ambient levels.

(6) Implementation. Under Tier III, the metals controls shall be implemented by limiting feed rates of the individual metals to levels during the trial burn, for new facilities or an interim status facility applying for a permit, or the compliance test, for interim status facilities. The feed rate averaging periods are the same as provided by Subsections R315-266-106(b)(1)(i) and (ii) and (b)(2)(ii). The feed rate of metals in each feedstream shall be monitored to ensure that the feed rate limits for the feedstreams specified under Sections R315-266-102 or 103 are not exceeded.

(e) Adjusted Tier I feed rate screening limits. The owner or operator may adjust the feed rate screening limits provided by appendix I of Rule R315-266 to account for site-specific dispersion modeling. Under this approach, the adjusted feed rate screening limit for a metal is determined by back-calculating from the acceptable ambient level provided by

appendices IV and V of Rule R315-266 using dispersion modeling to determine the maximum allowable emission rate. This emission rate becomes the adjusted Tier I feed rate screening limit. The feed rate screening limits for carcinogenic metals are implemented as prescribed in Subsection R315-266-106(b)(2).

(f) Alternative implementation approaches.

(1) The Director may approve on a case-by-case basis approaches to implement the Tier II or Tier III metals emission limits provided by Subsections R315-266-106(c) or (d) alternative to monitoring the feed rate of metals in each feedstream.

(2) The emission limits provided by Subsection R315-266-106(d) shall be determined as follows:

(i) For each noncarcinogenic metal, by back-calculating from the RAC provided in appendix IV of Rule R315-266 to determine the allowable emission rate for each metal using the dilution factor for the maximum annual average ground level concentration predicted by dispersion modeling in conformance with Subsection R315-266-106(h); and

(ii) For each carcinogenic metal by:

(A) Back-calculating from the RSD provided in appendix V of Rule R315-266 to determine the allowable emission rate for each metal if that metal were the only carcinogenic metal emitted using the dilution factor for the maximum annual average ground level concentration predicted by dispersion modeling in conformance with Subsection R315-266-106(h); and

(B) If more than one carcinogenic metal is emitted, selecting an emission limit for each carcinogenic metal not to exceed the emission rate determined by Subsection R315-266-106(f)(2)(ii)(A) such that the sum for all carcinogenic metals of the ratios of the selected emission limit to the emission rate determined by Subsection R315-266-106(f)(2)(ii)(A) does not exceed 1.0.

(g) Emission testing

(1) General. Emission testing for metals shall be conducted using Method 0060, Determinations of Metals in Stack Emissions, EPA Publication SW-846, as incorporated by reference in Section R315-260-11.

(2) Hexavalent chromium. Emissions of chromium are assumed to be hexavalent chromium unless the owner or operator conducts emissions testing to determine hexavalent chromium emissions using procedures prescribed in Method 0061, Determination of Hexavalent Chromium Emissions from Stationary Sources, EPA Publication SW-846, as incorporated by reference in Section R315-260-11.

(h) Dispersion Modeling. Dispersion modeling required under Section R315-266-106 shall be conducted according to methods recommended in appendix W of 40 CFR 51, "Guideline on Air Quality Models (Revised)" (1986) and its supplements, the "Hazardous Waste Combustion Air Quality Screening Procedure", provided in appendix IX of Rule R315-266, or in Screening Procedures for Estimating the Air Quality Impact of Stationary Sources, Revised, incorporated by reference in Section R315-260-11, to predict the maximum annual average off-site ground level concentration. However, on-site concentrations shall be considered when a person resides on-site.

(i) Enforcement. For the purposes of permit enforcement, compliance with the operating requirements specified in the permit, under Section R315-266-102, shall be regarded as compliance with Section R315-266-106. However, evidence that compliance with those permit conditions is insufficient to ensure compliance with the requirements of Section R315-266-106 may be "information" justifying modification or revocation and re-issuance of a permit under Section R315-270-41.

R315-266-107. Hazardous Waste Burned in Boilers and

Industrial Furnaces -- Standards to Control Hydrogen Chloride (HCl) and Chlorine Gas (Cl₂) Emissions.

(a) General. The owner or operator shall comply with the hydrogen chloride (HCl) and chlorine (Cl₂) controls provided by Subsection R315-266-107(b), (c), or (e).

(b) Screening limits

(1) Tier I feed rate screening limits. Feed rate screening limits are specified for total chlorine in appendix II of Rule R315-266 as a function of terrain-adjusted effective stack height and terrain and land use in the vicinity of the facility. The feed rate of total chlorine and chloride, both organic and inorganic, in all feed streams, including hazardous waste, fuels, and industrial furnace feed stocks shall not exceed the levels specified.

(2) Tier II emission rate screening limits. Emission rate screening limits for HCl and Cl₂ are specified in appendix III of Rule R315-266 as a function of terrain-adjusted effective stack height and terrain and land use in the vicinity of the facility. The stack emission rates of HCl and Cl₂ shall not exceed the levels specified.

(3) Definitions and limitations. The definitions and limitations provided by Subsection R315-266-106(b) for the following terms also apply to the screening limits provided by Subsection R315-266-107(b): terrain-adjusted effective stack height, good engineering practice stack height, terrain type, land use, and criteria for facilities not eligible to use the screening limits.

(4) Multiple stacks. Owners and operators of facilities with more than one on-site stack from a boiler, industrial furnace, incinerator, or other thermal treatment unit subject to controls on HCl or Cl₂ emissions under a RCRA operating permit or interim status controls shall comply with the Tier I and Tier II screening limits for those stacks assuming all hazardous waste is fed into the device with the worst-case stack based on dispersion characteristics.

(i) The worst-case stack is determined by procedures provided in Subsection R315-266-106(b)(6).

(ii) Under Tier I, the total feed rate of chlorine and chloride to all subject devices shall not exceed the screening limit for the worst-case stack.

(iii) Under Tier II, the total emissions of HCl and Cl₂ from all subject stacks shall not exceed the screening limit for the worst-case stack.

(c) Tier III site-specific risk assessments

(1) General. Conformance with the Tier III controls shall be demonstrated by emissions testing to determine the emission rate for HCl and Cl₂, air dispersion modeling to predict the maximum annual average off-site ground level concentration for each compound, and a demonstration that acceptable ambient levels are not exceeded.

(2) Acceptable ambient levels. Appendix IV of Rule R315-266 lists the reference air concentrations (RACs) for HCl, 7 micrograms per cubic meter, and Cl₂, 0.4 micrograms per cubic meter.

(3) Multiple stacks. Owners and operators of facilities with more than one on-site stack from a boiler, industrial furnace, incinerator, or other thermal treatment unit subject to controls on HCl or Cl₂ emissions under a RCRA operating permit or interim status controls shall conduct emissions testing and dispersion modeling to demonstrate that the aggregate emissions from all such on-site stacks do not result in an exceedance of the acceptable ambient levels for HCl and Cl₂.

(d) Averaging periods. The HCl and Cl₂ controls are implemented by limiting the feed rate of total chlorine and chloride in all feedstreams, including hazardous waste, fuels, and industrial furnace feed stocks. Under Tier I, the feed rate of total chloride and chlorine is limited to the Tier I Screening Limits. Under Tier II and Tier III, the feed rate of total chloride and chlorine is limited to the feed rates during the trial burn, for

new facilities or an interim status facility applying for a permit, or the compliance test, for interim status facilities). The feed rate limits are based on either:

(1) An hourly rolling average as defined in Section R315-266-102(e)(6); or

(2) An instantaneous basis not to be exceeded at any time.

(e) Adjusted Tier I feed rate screening limits. The owner or operator may adjust the feed rate screening limit provided by appendix II of Rule R315-266 to account for site-specific dispersion modeling. Under this approach, the adjusted feed rate screening limit is determined by back-calculating from the acceptable ambient level for Cl₂ provided by appendix IV of Rule R315-266 using dispersion modeling to determine the maximum allowable emission rate. This emission rate becomes the adjusted Tier I feed rate screening limit.

(f) Emissions testing. Emissions testing for HCl and Cl₂ shall be conducted using the procedures described in Methods 0050 or 0051, EPA Publication SW-846, as incorporated by reference in Section R315-260-11.

(g) Dispersion modeling. Dispersion modeling shall be conducted according to the provisions of Subsection R315-266-106(h).

(h) Enforcement. For the purposes of permit enforcement, compliance with the operating requirements specified in the permit, under Section R315-266-102, shall be regarded as compliance with Section R315-266-107. However, evidence that compliance with those permit conditions is insufficient to ensure compliance with the requirements of Section R315-266-107 may be "information" justifying modification or revocation and re-issuance of a permit under Section R315-270-41.

R315-266-108. Hazardous Waste Burned in Boilers and Industrial Furnaces -- Small Quantity On-Site Burner Exemption.

(a) Exempt quantities. Owners and operators of facilities that burn hazardous waste in an on-site boiler or industrial furnace are exempt from the requirements of Sections R315-266-100 through 112 provided that:

(1) The quantity of hazardous waste burned in a device for a calendar month does not exceed the limits provided in the following table based on the terrain-adjusted effective stack height as defined in Subsection R315-266-106(b)(3):

Terrain-adjusted effective stack height of device (meters)	Allowable hazardous waste burning rate(gallons/month)
0 to 3.9	0
4.0 to 5.9	13
6.0 to 7.9	18
8.0 to 9.9	27
10.0 to 11.9	40
12.0 to 13.9	48
14.0 to 15.9	59
16.0 to 17.9	69
18.0 to 19.9	76
20.0 to 21.9	84
22.0 to 23.9	93
24.0 to 25.9	100
26.0 to 27.9	110
28.0 to 29.9	130
30.0 to 34.9	140
35.0 to 39.9	170
40.0 to 44.9	210
45.0 to 49.9	260
50.0 to 54.9	330
55.0 to 59.9	400
60.0 to 64.9	490
65.0 to 69.9	610
70.0 to 74.9	680
75.0 to 79.9	760
80.0 to 84.9	850
85.0 to 89.9	960
90.0 to 94.9	1,100
95.0 to 99.9	1,200

100.0 to 104.9	1,300
105.0 to 109.9	1,500
110.0 to 114.9	1,700
115.0 or greater	1,900

(2) The maximum hazardous waste firing rate does not exceed at any time 1 percent of the total fuel requirements for the device, hazardous waste plus other fuel, on a total heat input or mass input basis, whichever results in the lower mass feed rate of hazardous waste.

(3) The hazardous waste has a minimum heating value of 5,000 Btu/lb, as generated; and

(4) The hazardous waste fuel does not contain, and is not derived from, EPA Hazardous Waste Nos. F020, F021, F022, F023, F026, or F027.

(b) Mixing with nonhazardous fuels. If hazardous waste fuel is mixed with a nonhazardous fuel, the quantity of hazardous waste before such mixing is used to comply with Subsection R315-266-108(a).

(c) Multiple stacks. If an owner or operator burns hazardous waste in more than one on-site boiler or industrial furnace exempt under Section R315-266-108, the quantity limits provided by Subsection R315-266-108(a)(1) are implemented according to the following equation:

The summation of Actual Quantity Burned_(i)/Allowable quantity Burned_(i) for i = 1 to n is less than or equal to 1.0

where:

n means the number of stacks;

Actual Quantity Burned means the waste quantity burned per month in device "i";

Allowable Quantity Burned means the maximum allowable exempt quantity for stack "i" from the table in Subsection R315-266-108(a)(1).

Hazardous wastes that are subject to the special requirements for small quantity generators under Section R315-261-5 may be burned in an off-site device under the exemption provided by Section R315-266-108, but shall be included in the quantity determination for the exemption.

(d) Notification requirements. The owner or operator of facilities qualifying for the small quantity burner exemption under Section R315-266-108 shall provide a one-time signed, written notice to the Director indicating the following:

(1) The combustion unit is operating as a small quantity burner of hazardous waste;

(2) The owner and operator are in compliance with the requirements of Section R315-266-108; and

(3) The maximum quantity of hazardous waste that the facility may burn per month as provided by Subsection R315-266-108(a)(1).

(e) Recordkeeping requirements. The owner or operator shall maintain at the facility for at least three years sufficient records documenting compliance with the hazardous waste quantity, firing rate, and heating value limits of Section R315-266-108. At a minimum, these records shall indicate the quantity of hazardous waste and other fuel burned in each unit per calendar month, and the heating value of the hazardous waste.

R315-266-109. Hazardous Waste Burned in Boilers and Industrial Furnaces -- Low Risk Waste Exemption.

(a) Waiver of DRE standard. The DRE standard of Subsection R315-266-104(a) does not apply if the boiler or industrial furnace is operated in conformance with Subsection R315-266-109(a)(1) and the owner or operator demonstrates by procedures prescribed in Subsection R315-266-109(a)(2) that the burning will not result in unacceptable adverse health effects.

(1) The device shall be operated as follows:

(i) A minimum of 50 percent of fuel fired to the device shall be fossil fuel, fuels derived from fossil fuel, tall oil, or, if

approved by the Director on a case-by-case basis, other nonhazardous fuel with combustion characteristics comparable to fossil fuel. Such fuels are termed "primary fuel" for purposes of Section R315-266-109. Tall oil is a fuel derived from vegetable and rosin fatty acids. The 50 percent primary fuel firing rate shall be determined on a total heat or mass input basis, whichever results in the greater mass feed rate of primary fuel fired;

(ii) Primary fuels and hazardous waste fuels shall have a minimum as-fired heating value of 8,000 Btu/lb;

(iii) The hazardous waste is fired directly into the primary fuel flame zone of the combustion chamber; and

(iv) The device operates in conformance with the carbon monoxide controls provided by Subsection R315-266-104(b)(1). Devices subject to the exemption provided by Section R315-266-109 are not eligible for the alternative carbon monoxide controls provided by Subsection R315-266-104(c).

(2) Procedures to demonstrate that the hazardous waste burning will not pose unacceptable adverse public health effects are as follows:

(i) Identify and quantify those nonmetal compounds listed in appendix VIII, Rule R315-261 that could reasonably be expected to be present in the hazardous waste. The constituents excluded from analysis shall be identified and the basis for their exclusion explained;

(ii) Calculate reasonable, worst case emission rates for each constituent identified in Subsection R315-266-109(a)(2)(i) by assuming the device achieves 99.9 percent destruction and removal efficiency. That is, assume that 0.1 percent of the mass weight of each constituent fed to the device is emitted.

(iii) For each constituent identified in Subsection R315-266-109(a)(2)(i), use emissions dispersion modeling to predict the maximum annual average ground level concentration of the constituent.

(A) Dispersion modeling shall be conducted using methods specified in Subsection R315-266-106(h).

(B) Owners and operators of facilities with more than one on-site stack from a boiler or industrial furnace that is exempt under Section R315-266-109 shall conduct dispersion modeling of emissions from all stacks exempt under Section R315-266-109 to predict ambient levels prescribed by Subsection R315-266-109(a).

(iv) Ground level concentrations of constituents predicted under Subsection R315-266-109(a)(2)(iii) shall not exceed the following levels:

(A) For the noncarcinogenic compounds listed in appendix IV of Rule R315-266, the levels established in appendix IV;

(B) For the carcinogenic compounds listed in appendix V of Rule R315-266, the sum for all constituents of the ratios of the actual ground level concentration to the level established in appendix V cannot exceed 1.0; and

(C) For constituents not listed in appendix IV or V, 0.1 micrograms per cubic meter.

(b) Waiver of particulate matter standard. The particulate matter standard of Section R315-266-105 does not apply if:

(1) The DRE standard is waived under Subsection R315-266-109(a); and

(2) The owner or operator complies with the Tier I or adjusted Tier I metals feed rate screening limits provided by Subsections R315-266-106(b) or (c).

R315-266-110. Hazardous Waste Burned in Boilers and Industrial Furnaces -- Waiver of DRE Trial Burn for Boilers.

Boilers that operate under the special requirements of Section R315-266-110, and that do not burn hazardous waste containing, or waste derived from, EPA Hazardous Waste Nos. F020, F021, F022, F023, F026, or F027, are considered to be in conformance with the DRE standard of Subsection R315-266-

104(a), and a trial burn to demonstrate DRE is waived. When burning hazardous waste:

(a) A minimum of 50 percent of fuel fired to the device shall be fossil fuel, fuels derived from fossil fuel, tall oil, or, if approved by the Director on a case-by-case basis, other nonhazardous fuel with combustion characteristics comparable to fossil fuel. Such fuels are termed "primary fuel" for purposes of Section R315-266-110. Tall oil is a fuel derived from vegetable and rosin fatty acids. The 50 percent primary fuel firing rate shall be determined on a total heat or mass input basis, whichever results in the greater mass feed rate of primary fuel fired;

(b) Boiler load shall not be less than 40 percent. Boiler load is the ratio at any time of the total heat input to the maximum design heat input;

(c) Primary fuels and hazardous waste fuels shall have a minimum as-fired heating value of 8,000 Btu/lb, and each material fired in a burner where hazardous waste is fired shall have a heating value of at least 8,000 Btu/lb, as-fired;

(d) The device shall operate in conformance with the carbon monoxide standard provided by Subsection R315-266-104(b)(1). Boilers subject to the waiver of the DRE trial burn provided by Section R315-266-110 are not eligible for the alternative carbon monoxide standard provided by Subsection R315-266-104(c);

(e) The boiler shall be a watertube type boiler that does not feed fuel using a stoker or stoker type mechanism; and

(f) The hazardous waste shall be fired directly into the primary fuel flame zone of the combustion chamber with an air or steam atomization firing system, mechanical atomization system, or a rotary cup atomization system under the following conditions:

(1) Viscosity. The viscosity of the hazardous waste fuel as-fired shall not exceed 300 SSU;

(2) Particle size. When a high pressure air or steam atomizer, low pressure atomizer, or mechanical atomizer is used, 70% of the hazardous waste fuel shall pass through a 200 mesh, 74 micron, screen, and when a rotary cup atomizer is used, 70% of the hazardous waste shall pass through a 100 mesh, 150 micron, screen;

(3) Mechanical atomization systems. Fuel pressure within a mechanical atomization system and fuel flow rate shall be maintained within the design range taking into account the viscosity and volatility of the fuel;

(4) Rotary cup atomization systems. Fuel flow rate through a rotary cup atomization system shall be maintained within the design range taking into account the viscosity and volatility of the fuel.

R315-266-111. Hazardous Waste Burned in Boilers and Industrial Furnaces -- Standards for Direct Transfer.

(a) Applicability. The regulations in Section R315-266-111 apply to owners and operators of boilers and industrial furnaces subject to Sections R315-266-102 or 103 if hazardous waste is directly transferred from a transport vehicle to a boiler or industrial furnace without the use of a storage unit.

(b) Definitions.

(1) When used in Section R315-266-111, the following terms have the meanings given below:

Direct transfer equipment means any device, including but not limited to, such devices as piping, fittings, flanges, valves, and pumps, that is used to distribute, meter, or control the flow of hazardous waste between a container, i.e., transport vehicle, and a boiler or industrial furnace.

Container means any portable device in which hazardous waste is transported, stored, treated, or otherwise handled, and includes transport vehicles that are containers themselves, e.g., tank trucks, tanker-trailers, and rail tank cars, and containers placed on or in a transport vehicle.

(2) Section R315-266-111 references several requirements provided in Sections R315-264-170 through 200 and 40 CFR 265.170 through 202, which are adopted by reference. For purposes of Section R315-266-111, the term "tank systems" in those referenced requirements means direct transfer equipment as defined in Subsection R315-266-111(b)(1).

(c) General operating requirements.

(1) No direct transfer of a pumpable hazardous waste shall be conducted from an open-top container to a boiler or industrial furnace.

(2) Direct transfer equipment used for pumpable hazardous waste shall always be closed, except when necessary to add or remove the waste, and shall not be opened, handled, or stored in a manner that may cause any rupture or leak.

(3) The direct transfer of hazardous waste to a boiler or industrial furnace shall be conducted so that it does not:

(i) Generate extreme heat or pressure, fire, explosion, or violent reaction;

(ii) Produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantities to threaten human health;

(iii) Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions;

(iv) Damage the structural integrity of the container or direct transfer equipment containing the waste;

(v) Adversely affect the capability of the boiler or industrial furnace to meet the standards provided by Sections R315-266-104 through 107; or

(vi) Threaten human health or the environment.

(4) Hazardous waste shall not be placed in direct transfer equipment, if it could cause the equipment or its secondary containment system to rupture, leak, corrode, or otherwise fail.

(5) The owner or operator of the facility shall use appropriate controls and practices to prevent spills and overflows from the direct transfer equipment or its secondary containment systems. These include at a minimum:

(i) Spill prevention controls, e.g., check valves, dry discount couplings; and

(ii) Automatic waste feed cutoff to use if a leak or spill occurs from the direct transfer equipment.

(d) Areas where direct transfer vehicles, containers, are located. Applying the definition of container under Section R315-266-111, owners and operators shall comply with the following requirements:

(1) The containment requirements of Section R315-264-175;

(2) The use and management requirements of 40 CFR 265.171 through 178, which are adopted by reference, except for 265-174, and except that in lieu of the special requirements of 265-176 for ignitable or reactive waste, the owner or operator may comply with the requirements for the maintenance of protective distances between the waste management area and any public ways, streets, alleys, or an adjacent property line that can be built upon as required in Tables 2-1 through 2-6 of the National Fire Protection Association's (NFPA) "Flammable and Combustible Liquids Code," (1977 or 1981), incorporated by reference, see Section R315-260-11. The owner or operator shall obtain and keep on file at the facility a written certification by the local Fire Marshall that the installation meets the subject NFPA codes; and

(3) The closure requirements of Section R315-264-178.

(e) Direct transfer equipment. Direct transfer equipment shall meet the following requirements:

(1) Secondary containment. Owners and operators shall comply with the secondary containment requirements of 40 CFR 265.193, which are adopted by reference, except for 265-193(a), (d), (e), and (i) as follows:

(i) For all new direct transfer equipment, prior to their being put into service; and

(ii) For existing direct transfer equipment within 2 years

after August 21, 1991.

(2) Requirements prior to meeting secondary containment requirements.

(i) For existing direct transfer equipment that does not have secondary containment, the owner or operator shall determine whether the equipment is leaking or is unfit for use. The owner or operator shall obtain and keep on file at the facility a written assessment reviewed and certified by a qualified, registered professional engineer in accordance with Subsection R315-270-11(d) that attests to the equipment's integrity by August 21, 1992.

(ii) This assessment shall determine whether the direct transfer equipment is adequately designed and has sufficient structural strength and compatibility with the waste(s) to be transferred to ensure that it will not collapse, rupture, or fail. At a minimum, this assessment shall consider the following:

(A) Design standard(s), if available, according to which the direct transfer equipment was constructed;

(B) Hazardous characteristics of the waste(s) that have been or will be handled;

(C) Existing corrosion protection measures;

(D) Documented age of the equipment, if available, otherwise, an estimate of the age; and

(E) Results of a leak test or other integrity examination such that the effects of temperature variations, vapor pockets, cracks, leaks, corrosion, and erosion are accounted for.

(iii) If, as a result of the assessment specified above, the direct transfer equipment is found to be leaking or unfit for use, the owner or operator shall comply with the requirements of 40 CFR 265.196(a) and (b), which are adopted by reference.

(3) Inspections and recordkeeping.

(i) The owner or operator shall inspect at least once each operating hour when hazardous waste is being transferred from the transport vehicle, container, to the boiler or industrial furnace:

(A) Overfill/spill control equipment, e.g., waste-feed cutoff systems, bypass systems, and drainage systems, to ensure that it is in good working order;

(B) The above ground portions of the direct transfer equipment to detect corrosion, erosion, or releases of waste, e.g., wet spots, dead vegetation; and

(C) Data gathered from monitoring equipment and leak-detection equipment, e.g., pressure and temperature gauges, to ensure that the direct transfer equipment is being operated according to its design.

(ii) The owner or operator shall inspect cathodic protection systems, if used, to ensure that they are functioning properly according to the schedule provided by 40 CFR 265.195(b), which is adopted by reference:

(iii) Records of inspections made under Subsection R315-266-11(e)(3) shall be maintained in the operating record at the facility, and available for inspection for at least 3 years from the date of the inspection.

(4) Design and installation of new ancillary equipment. Owners and operators shall comply with the requirements of 40 CFR 265.192, which is adopted by reference.

(5) Response to leaks or spills. Owners and operators shall comply with the requirements of 40 CFR 265.196, which is adopted by reference.

(6) Closure. Owners and operators shall comply with the requirements of 40 CFR 265.197, which are adopted by reference, except for 265-197(c)(2) through (c)(4).

R315-266-112. Hazardous Waste Burned in Boilers and Industrial Furnaces -- Regulation of Residues.

A residue derived from the burning or processing of hazardous waste in a boiler or industrial furnace is not excluded from the definition of a hazardous waste under Subsections R315-261-4(b)(4), (7), or (8) unless the device and the owner or

operator meet the following requirements:

(a) The device meets the following criteria:

(1) Boilers. Boilers shall burn at least 50% coal on a total heat input or mass input basis, whichever results in the greater mass feed rate of coal;

(2) Ore or mineral furnaces. Industrial furnaces subject to Subsection R315-261-4(b)(7) shall process at least 50% by weight normal, nonhazardous raw materials;

(3) Cement kilns. Cement kilns shall process at least 50% by weight normal cement-production raw materials;

(b) The owner or operator demonstrates that the hazardous waste does not significantly affect the residue by demonstrating conformance with either of the following criteria:

(1) Comparison of waste-derived residue with normal residue. The waste-derived residue shall not contain appendix VIII, Rule R315-261 constituents, toxic constituents, that could reasonably be attributable to the hazardous waste at concentrations significantly higher than in residue generated without burning or processing of hazardous waste, using the following procedure. Toxic compounds that could reasonably be attributable to burning or processing the hazardous waste, constituents of concern, include toxic constituents in the hazardous waste, and the organic compounds listed in appendix VIII of Rule R315-266 that may be generated as products of incomplete combustion. For polychlorinated dibenzo-p-dioxins and polychlorinated dibenzo-furans, analyses shall be performed to determine specific congeners and homologues, and the results converted to 2,3,7,8-TCDD equivalent values using the procedure specified in section 4.0 of appendix IX of Rule R315-266.

(i) Normal residue. Concentrations of toxic constituents of concern in normal residue shall be determined based on analyses of a minimum of 10 samples representing a minimum of 10 days of operation. Composite samples may be used to develop a sample for analysis provided that the compositing period does not exceed 24 hours. The upper tolerance limit, at 95% confidence with a 95% proportion of the sample distribution, of the concentration in the normal residue shall be considered the statistically-derived concentration in the normal residue. If changes in raw materials or fuels reduce the statistically-derived concentrations of the toxic constituents of concern in the normal residue, the statistically-derived concentrations shall be revised or statistically-derived concentrations of toxic constituents in normal residue shall be established for a new mode of operation with the new raw material or fuel. To determine the upper tolerance limit in the normal residue, the owner or operator shall use statistical procedures prescribed in "Statistical Methodology for Bevill Residue Determinations" in appendix IX of Rule R315-266.

(ii) Waste-derived residue. Waste-derived residue shall be sampled and analyzed as often as necessary to determine whether the residue generated during each 24-hour period has concentrations of toxic constituents that are higher than the concentrations established for the normal residue under Subsection R315-266-112(b)(1)(i). If so, hazardous waste burning has significantly affected the residue and the residue shall not be excluded from the definition of a hazardous waste. Concentrations of toxic constituents of concern in the waste-derived residue shall be determined based on analysis of one or more samples obtained over a 24-hour period. Multiple samples may be analyzed, and multiple samples may be taken to form a composite sample for analysis provided that the sampling period does not exceed 24 hours. If more than one sample is analyzed to characterize waste-derived residues generated over a 24-hour period, the concentration of each toxic constituent shall be the arithmetic mean of the concentrations in the samples. No results may be disregarded; or

(2) Comparison of waste-derived residue concentrations with health-based limits

(i) Nonmetal constituents: The concentration of each nonmetal toxic constituent of concern, specified in Subsection R315-266-112(b)(1), in the waste-derived residue shall not exceed the health-based level specified in appendix VII of Rule R315-266, or the level of detection, whichever is higher. If a health-based limit for a constituent of concern is not listed in appendix VII of Rule R315-266, then a limit of 0.002 micrograms per kilogram or the level of detection, which shall be determined by using appropriate analytical procedures, whichever is higher, shall be used. The levels specified in appendix VII of Rule R315-266, and the default level of 0.002 micrograms per kilogram or the level of detection for constituents as identified in Note 1 of appendix VII of Rule R315-266, are administratively stayed under the condition, for those constituents specified in Subsection R315-266-112(b)(1), that the owner or operator complies with alternative levels defined as the land disposal restriction limits specified in Section R315-268-43 for F039 nonwastewaters. In complying with those alternative levels, if an owner or operator is unable to detect a constituent despite documenting use of best good-faith efforts as defined by applicable guidance or standards, the owner or operator is deemed to be in compliance for that constituent. Until new guidance or standards are developed, the owner or operator may demonstrate such good-faith efforts by achieving a detection limit for the constituent that does not exceed an order of magnitude above the level provided by Section R315-268-43 for F039 nonwastewaters. In complying with the Section R315-268-43 F039 nonwastewater levels for polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans, analyses shall be performed for total hexachlorodibenzo-p-dioxins, total hexachlorodibenzofurans, total pentachlorodibenzo-p-dioxins, total pentachlorodibenzofurans, total tetrachlorodibenzo-p-dioxins, and total tetrachlorodibenzofurans.

Note to Subsection R315-266-112(b)(2)(i): The administrative stay, under the condition that the owner or operator complies with alternative levels defined as the land disposal restriction limits specified in Section R315-268-43 for F039 nonwastewaters, remains in effect until further administrative action is taken and notice is published.

(ii) Metal constituents. The concentration of metals in an extract obtained using the Toxicity Characteristic Leaching Procedure of Section R315-261-24 shall not exceed the levels specified in appendix VII of Rule R315-266; and

(iii) Sampling and analysis. Waste-derived residue shall be sampled and analyzed as often as necessary to determine whether the residue generated during each 24-hour period has concentrations of toxic constituents that are higher than the health-based levels. Concentrations of toxic constituents of concern in the waste-derived residue shall be determined based on analysis of one or more samples obtained over a 24-hour period. Multiple samples may be analyzed, and multiple samples may be taken to form a composite sample for analysis provided that the sampling period does not exceed 24 hours. If more than one sample is analyzed to characterize waste-derived residues generated over a 24-hour period, the concentration of each toxic constituent shall be the arithmetic mean of the concentrations in the samples. No results may be disregarded; and

(c) Records sufficient to document compliance with the provisions of Section R315-266-112 shall be retained until closure of the boiler or industrial furnace unit. At a minimum, the following shall be recorded.

(1) Levels of constituents in appendix VIII, Rule R315-261, that are present in waste-derived residues;

(2) If the waste-derived residue is compared with normal residue under Subsection R315-266-112(b)(1):

(i) The levels of constituents in appendix VIII, Rule R315-261, that are present in normal residues; and

(ii) Data and information, including analyses of samples as necessary, obtained to determine if changes in raw materials or fuels would reduce the concentration of toxic constituents of concern in the normal residue.

R315-266-202. Military Munitions -- Definition of Solid Waste.

- (a) Reserved.
- (b) Reserved.
- (c) Reserved.
- (d) For purposes of Subsection 19-6-102(19)(a), a used or fired military munition is a solid waste, and, therefore, is potentially subject to RCRA corrective action authorities under sections 3004(u) and (v), and 3008(h), or imminent and substantial endangerment authorities under section 7003, if the munition lands off-range and is not promptly rendered safe and/or retrieved. Any imminent and substantial threats associated with any remaining material shall be addressed. If remedial action is infeasible, the operator of the range shall maintain a record of the event for as long as any threat remains. The record shall include the type of munition and its location, to the extent the location is known.

R315-266-203. Appendix I to Rule R315-266 -- Tier I and Tier II Feed Rate and Emissions Screening Limits for Metals.

Appendix I of 40 CFR 266, 2015 edition, is adopted and incorporated by reference.

R315-266-204. Appendix II to Rule R315-266 -- Tier I Feed Rate Screening Limits for Total Chlorine.

Terrain-adjusted effective stack height (m)	Table		Complex Terrain (g/hr)
	Noncomplex Terrain Urban (g/hr)	Rural (g/hr)	
4	8.2E+01	4.2E+01	1.9E+01
6	9.1E+01	4.8E+01	2.8E+01
8	1.0E+02	5.3E+01	4.1E+01
10	1.2E+02	6.2E+01	5.8E+01
12	1.3E+02	7.7E+01	7.2E+01
14	1.5E+02	9.1E+01	9.1E+01
16	1.7E+02	1.2E+02	1.1E+02
18	1.9E+02	1.4E+02	1.2E+02
20	2.1E+02	1.8E+02	1.3E+02
22	2.4E+02	2.3E+02	1.4E+02
24	2.7E+02	2.9E+02	1.6E+02
26	3.1E+02	3.7E+02	1.7E+02
28	3.5E+02	4.7E+02	1.9E+02
30	3.9E+02	5.8E+02	2.1E+02
35	5.3E+02	9.6E+02	2.6E+02
40	6.2E+02	1.4E+03	3.3E+02
45	8.2E+02	2.0E+03	4.0E+02
50	1.1E+03	2.6E+03	4.8E+02
55	1.3E+03	3.5E+03	6.2E+02
60	1.6E+03	4.6E+03	7.7E+02
65	2.0E+03	6.2E+03	9.1E+02
70	2.3E+03	7.2E+03	1.1E+03
75	2.5E+03	8.6E+03	1.2E+03
80	2.9E+03	1.0E+04	1.3E+03
85	3.3E+03	1.2E+04	1.4E+03
90	3.7E+03	1.4E+04	1.6E+03
95	4.2E+03	1.7E+04	1.8E+03
100	4.8E+03	2.1E+04	2.0E+03
105	5.3E+03	2.4E+04	2.3E+03
110	6.2E+03	2.9E+04	2.5E+03
115	7.2E+03	3.5E+04	2.8E+03
120	8.2E+03	4.1E+04	3.2E+03

R315-266-205. Appendix III to Rule R315-266 -- Tier II Emission Rate Screening Limits for Free Chlorine and Hydrogen Chloride.

Appendix III of 40 CFR 266, 2015 edition, is adopted and incorporated by reference.

R315-266-206. Appendix IV to Rule R315-266 -- Reference

Air Concentrations*.

Constituent	CAS No.	RAC (ug/m ³)
Acetaldehyde	75-07-0	10
Acetonitrile	75-05-8	10
Acetophenone	98-86-2	100
Acrolein	107-02-8	20
Aldicarb	116-06-3	1
Aluminum Phosphide	20859-73-8	0.3
Allyl Alcohol	107-18-6	5
Antimony	7440-36-0	0.3
Barium	7440-39-3	50
Barium Cyanide	542-62-1	50
Bromomethane	74-83-9	0.8
Calcium Cyanide	592-01-8	30
Carbon Disulfide	75-15-0	200
Chloral	75-87-6	2
Chlorine (free)		0.4
2-Chloro-1,3-butadiene	126-99-8	3
Chromium III	16065-83-1	1000
Copper Cyanide	544-92-3	5
Cresols	1319-77-3	50
Cumene	98-82-8	1
Cyanide (free)	57-12-15	20
Cyanogen	460-19-5	30
Cyanogen Bromide	506-68-3	80
Di-n-butyl Phthalate	84-74-2	100
o-Dichlorobenzene	95-50-1	10
p-Dichlorobenzene	106-46-7	10
Dichlorodifluoromethane	75-71-8	200
2,4-Dichlorophenol	120-83-2	3
Diethyl Phthalate	84-66-2	800
Dimethoate	60-51-5	0.8
2,4-Dinitrophenol	51-28-5	2
Dinoseb	88-85-7	0.9
Diphenylamine	122-39-4	20
Endosulfan	115-29-1	0.05
Endrin	72-20-8	0.3
Fluorine	7782-41-4	50
Formic Acid	64-18-6	2000
Glycidyaldehyde	765-34-4	0.3
Hexachlorocyclopentadiene	77-47-4	5
Hexachlorophene	70-30-4	0.3
Hydrocyanic Acid	74-90-8	20
Hydrogen Chloride	7647-01-1	7
Hydrogen Sulfide	7783-06-4	3
Isobutyl Alcohol	78-83-1	300
Lead	7439-92-1	0.09
Maleic Anhydride	108-31-6	100
Mercury	7439-97-6	0.3
Methacrylonitrile	126-98-7	0.1
Methomyl	16752-77-5	20
Methoxychlor	72-43-5	50
Methyl Chlorocarbonate	79-22-1	1000
Methyl Ethyl Ketone	78-93-3	80
Methyl Parathion	298-00-0	0.3
Nickel Cyanide	557-19-7	20
Nitric Oxide	10102-43-9	100
Nitrobenzene	98-95-3	0.8
Pentachlorobenzene	608-93-5	0.8
Pentachlorophenol	87-86-5	30
Phenol	108-95-2	30
M-Phenylenediamine	108-45-2	5
Phenylmercuric Acetate	62-38-4	0.075
Phosphine	7803-51-2	0.3
Phthalic Anhydride	85-44-9	2000
Potassium Cyanide	151-50-8	50
Potassium Silver Cyanide	506-61-6	200
Pyridine	110-86-1	1
Selenious Acid	7783-60-8	3
Selenourea	630-10-4	5
Silver	7440-22-4	3
Silver Cyanide	506-64-9	100
Sodium Cyanide	143-33-9	30
Strychnine	57-24-9	0.3
1,2,4,5-Tetrachlorobenzene	95-94-3	0.3
2,3,4,6-Tetrachlorophenol	58-90-2	30
Tetraethyl Lead	78-00-2	0.0001
Tetrahydrofuran	109-99-9	10
Thallic Oxide	1314-32-5	0.3
Thallium	7440-28-0	0.5
Thallium (I) Acetate	563-68-8	0.5
Thallium (I) Carbonate	6533-73-9	0.3
Thallium (I) Chloride	7791-12-0	0.3
Thallium (I) Nitrate	10102-45-1	0.5
Thallium Selenite	12039-52-0	0.5
Thallium (I) Sulfate	7446-18-6	0.075

Thiram	137-26-8	5
Toluene	108-88-3	300
1,2,4-Trichlorobenzene	120-82-1	20
Trichloromonofluoromethane	75-69-4	300
2,4,5-Trichlorophenol	95-95-4	100
Vanadium Pentoxide	1314-62-1	20
Warfarin	81-81-2	0.3
Xylenes	1330-20-7	80
Zinc Cyanide	557-21-1	50
Zinc Phosphide	1314-84-7	0.3

*The RAC for other appendix VIII Rule R315-261 constituents not listed herein or in appendix V of Rule R315-266 is 0.1 ug/m³.

R315-266-207. Appendix V to Rule R315-266 -- Risk Specific Doses.

Table

Constituent	CAS No.	Unit risk (m3/microg)	RsD (microg/m3)
Acrylamide	79-06-1	1.3E-03	7.7E-03
Acrylonitrile	107-13-1	6.8E-05	1.5E-01
Aldrin	309-00-2	4.9E-03	2.0E-03
Aniline	62-53-3	7.4E-06	1.4E+00
Arsenic	7440-38-2	4.3E-03	2.3E-03
Benz(a)anthracene	56-55-3	8.9E-04	1.1E-02
Benzene	71-43-2	8.3E-06	1.2E+00
Benzidine	92-87-5	6.7E-02	1.5E-04
Benzo(a)pyrene	50-32-8	3.3E-03	3.0E-03
Beryllium	7440-41-7	2.4E-03	4.2E-03
Bis(2-chloroethyl) ether	111-44-4	3.3E-04	3.0E-02
Bis(chloromethyl)ether	542-88-1	6.2E-02	1.6E-04
Bis(2-ethylhexyl)-phtalate	117-81-7	2.4E-07	4.2E+01
1,3-Butadiene	106-99-0	2.8E-04	3.6E-02
Cadmium	7440-43-9	1.8E-03	5.6E-03
Carbon Tetrachloride	56-23-5	1.5E-05	6.7E-01
Chlordane	57-74-9	3.7E-04	2.7E-02
Chloroform	67-66-3	2.3E-05	4.3E-01
Chloromethane	74-87-3	3.6E-06	2.8E+00
Chromium VI	7440-47-3	1.2E-02	8.3E-04
DDT	50-29-3	9.7E-05	1.0E-01
Dibenz(a,h)anthracene	53-70-3	1.4E-02	7.1E-04
1,2-Dibromo-3-chloropropane	96-12-8	6.3E-03	1.6E-03
1,2-Dibromoethane	106-93-4	2.2E-04	4.5E-02
1,1-Dichloroethane	75-34-3	2.6E-05	3.8E-01
1,2-Dichloroethane	107-06-2	2.6E-05	3.8E-01
1,1-Dichloroethylene	75-35-4	5.0E-05	2.0E-01
1,3-Dichloropropene	542-75-6	3.5E-01	2.9E-05
Dieldrin	60-57-1	4.6E-03	2.2E-03
Diethylstilbestrol	56-53-1	1.4E-01	7.1E-05
Dimethylnitrosamine	62-75-9	1.4E-02	7.1E-04
2,4-Dinitrotoluene	121-14-2	8.8E-05	1.1E-01
1,2-Diphenylhydrazine	122-66-7	2.2E-04	4.5E-02
1,4-Dioxane	123-91-1	1.4E-06	7.1E+00
Epichlorohydrin	106-89-8	1.2E-06	8.3E+00
Ethylene Oxide	75-21-8	1.0E-04	1.0E-01
Ethylene Dibromide	106-93-4	2.2E-04	4.5E-02
Formaldehyde	50-00-0	1.3E-05	7.7E-01
Heptachlor	76-44-8	1.3E-03	7.7E-03
Heptachlor Epoxide	1024-57-3	2.6E-03	3.8E-03
Hexachlorobenzene	118-74-1	4.9E-04	2.0E-02
Hexachlorobutadiene	87-68-3	2.0E-05	5.0E-01
Alpha-hexachloro-cyclohexane	319-84-6	1.8E-03	5.6E-03
Beta-hexachloro-cyclohexane	319-85-7	5.3E-04	1.9E-02
Gamma-hexachloro-cyclohexane	58-89-9	3.8E-04	2.6E-02
Hexachlorocyclohexane, Technical		5.1E-04	2.0E-02
Hexachlorodibenzo-p-dioxin (1,2 Mixture)		1.3E+0	7.7E-06
Hexachloroethane	67-72-1	4.0E-06	2.5E+00
Hydrazine	302-01-2	2.9E-03	3.4E-03
Hydrazine Sulfate	302-01-2	2.9E-03	3.4E-03
3-Methylcholanthrene	56-49-5	2.7E-03	3.7E-03
Methyl Hydrazine	60-34-4	3.1E-04	3.2E-02
Methylene Chloride	75-09-2	4.1E-06	2.4E+00
4,4'-Methylene-bis-2-chloroaniline	101-14-4	4.7E-05	2.1E-01
Nickel	7440-02-0	2.4E-04	4.2E-02
Nickel Refinery Dust	7440-02-0	2.4E-04	4.2E-02
Nickel Subulfide	12035-72-2	4.8E-04	2.1E-02

2-Nitropropane	79-46-9	2.7E-02	3.7E-04
N-Nitroso-n-butylamine	924-16-3	1.6E-03	6.3E-03
N-Nitroso-n-methylurea	684-93-5	8.6E-02	1.2E-04
N-Nitrosodiethylamine	55-18-5	4.3E-02	2.3E-04
N-Nitrosopyrrolidine	930-55-2	6.1E-04	1.6E-02
Pentachloronitrobenzene	82-68-8	7.3E-05	1.4E-01
PCBs	1336-36-3	1.2E-03	8.3E-03
Pronamide	23950-58-5	4.6E-06	2.2E+00
Reserpine	50-55-5	3.0E-03	3.3E-03
2,3,7,8-Tetrachloro-dibenzo-p-dioxin	1746-01-6	4.5E+01	2.2E-07
1,1,2,2-Tetrachloroethylene	127-18-4	4.8E-07	2.1E+01
Thiourea	62-56-6	5.5E-04	1.8E-02
1,1,2-Trichloroethane	79-00-5	1.6E-05	6.3E-01
Trichloroethylene	79-01-6	1.3E-06	7.7E+00
2,4,6-Trichlorophenol	88-06-2	5.7E-06	1.8E+00
Toxaphene	8001-35-2	3.2E-04	3.1E-02
Vinyl Chloride	75-01-4	7.1E-06	1.4E+00

R315-266-208. Appendix VI to Rule R315-266 -- Stack Plume Rise.

Appendix VI of 40 CFR 266, 2015 edition, is adopted and incorporated by reference.

R315-266-209. Appendix VII to Rule R315-266 -- Health-Based Limits for Exclusion of Waste-Derived Residues.

Table

Metals -- TCLP Extract Concentration Limits.

Constituent	CAS No.	Concentration limits (mg/L)
Antimony	7440-36-0	1xE+00
Arsenic	7440-38-2	5xE+00
Barium	7440-39-3	1xE+02
Beryllium	7440-41-7	7xE-03
Cadmium	7440-43-9	1xE+00
Chromium	7440-47-3	5xE+00
Lead	7439-92-1	5xE+00
Mercury	7439-97-6	2xE-01
Nickel	7440-02-0	7xE+01
Selenium	7782-49-2	1xE+00
Silver	7440-22-4	5xE+00
Thallium	7440-28-0	7xE+00

Nonmetals -- Residue Concentration Limits

Constituent	CAS No.	Concentration limits for residues (mg/kg)
Acetonitrile	75-05-8	2xE-01
Acetophenone	98-86-2	4xE+00
Acrolein	107-02-8	5xE-01
Acrylamide	79-06-1	2xE-04
Acrylonitrile	107-13-1	7xE-04
Aldrin	309-00-2	2xE-05
Allyl alcohol	107-18-6	2xE-01
Aluminum phosphide	20859-73-8	1xE-02
Aniline	62-53-3	6xE-02
Barium cyanide	542-62-1	1xE+00
Benz(a)anthracene	56-55-3	1xE-04
Benzene	71-43-2	5xE-03
Benzidine	92-87-5	1xE-06
Bis(2-chloroethyl) ether	111-44-4	3xE-04
Bis(chloroethyl) ether	542-88-1	2xE-06
Bis(2-ethylhexyl) phtalate	117-81-7	3xE+01
Bromoform	75-25-2	7xE-01
Calcium cyanide	592-01-8	1xE-06
Carbon disulfide	75-15-0	4xE+00
Carbon tetrachloride	56-23-5	5xE-03
Chlordane	57-74-9	3xE-04
Chlorobenzene	108-90-7	1xE+00
Chloroform	67-66-3	6xE-02
Copper cyanide	544-92-3	2xE-01
Cresols (Cresylic acid)	1319-77-3	2xE+00
Cyanogen	460-19-5	1xE+00
DDT	50-29-3	1xE-03
Dibenz(a, h)-anthracene	53-70-3	7xE-06
1,2-Dibromo-3-chloropropane	96-12-8	2xE-05
p-Dichlorobenzene	106-46-7	7.5xE-02

Dichlorodifluoromethane	75-71-8	7xE+00
1,1-Dichloroethylene	75-35-4	5xE-03
2,4-Dichlorophenol	120-83-2	1xE-01
1,3-Dichloropropene	542-75-6	1xE-03
Dieldrin	60-57-1	2xE-05
Diethyl phthalate	84-66-2	3xE+01
Diethylstilbesterol	56-53-1	7xE-07
Dimethoate	60-51-5	3xE-02
2,4-Dinitrotoluene	121-14-2	5xE-04
Diphenylamine	122-39-4	9xE-01
1,2-Diphenylhydrazine	122-66-7	5xE-04
Endosulfan	115-29-7	2xE-03
Endrin	72-20-8	2xE-04
Epichlorohydrin	106-89-8	4xE-02
Ethylene dibromide	106-93-4	4xE-07
Ethylene oxide	75-21-8	3xE-04
Fluorine	7782-41-4	4xE+00
Formic acid	64-18-6	7xE+01
Heptachlor	76-44-8	8xE-05
Heptachlor epoxide	1024-57-3	4xE-05
Hexachlorobenzene	118-74-1	2xE-04
Hexachlorobutadiene	87-68-3	5xE-03
Hexachlorocyclopentadiene	77-47-4	2xE-01
Hexachlorodibenzo-p-dioxins	19408-74-3	6xE-08
Hexachloroethane	67-72-1	3xE-02
Hydrazine	302-01-1	1xE-04
Hydrogen cyanide	74-90-8	7xE-05
Hydrogen sulfide	7783-06-4	1xE-06
Isobutyl alcohol	78-83-1	1xE+01
Methomyl	16752-77-5	1xE+00
Methoxychlor	72-43-5	1xE-01
3-Methylcholanthrene	56-49-5	4xE-05
4,4'-Methylenebis(2-chloroaniline)	101-14-4	2xE-03
Methylene chloride	75-09-2	5xE-02
Methyl ethyl ketone (MEK)	78-93-3	2xE+00
Methyl hydrazine	60-34-4	3xE-04
Methyl parathion	298-00-0	2xE-02
Naphthalene	91-20-3	1xE+01
Nickel cyanide	557-19-7	7xE-01
Nitric oxide	10102-43-9	4xE+00
Nitrobenzene	98-95-3	2xE-02
N-Nitrosodi-n-butylamine	924-16-3	6xE-05
N-Nitrosodiethylamine	55-18-5	2xE-06
N-Nitroso-N-methylurea	684-93-5	1xE-07
N-Nitrosopyrrolidine	930-55-2	2xE-04
Pentachlorobenzene	608-93-5	3xE-02
Pentachloronitrobenzene (PCNB)	82-68-8	1xE-01
Pentachlorophenol	87-86-5	1xE+00
Phenol	108-95-2	1xE+00
Phenylmercury acetate	62-38-4	3xE-03
Phosphine	7803-51-2	1xE-02
Polychlorinated biphenyls, N.O.S	1336-36-3	5xE-05
Potassium cyanide	151-50-8	2xE+00
Potassium silver cyanide	506-61-6	7xE+00
Pronamide	23950-58-5	3xE+00
Pyridine	110-86-1	4xE-02
Reserpine	50-55-5	3xE-05
Selenourea	630-10-4	2xE-01
Silver cyanide	506-64-9	4xE+00
Sodium cyanide	143-33-9	1xE+00
Strychnine	57-24-9	1xE-02
1,2,4,5-Tetrachlorobenzene	95-94-3	1xE-02
1,1,2,2-tetrachloroethane	79-34-5	2xE-03
Tetrachloroethylene	127-18-4	7xE-01
2,3,4,6-Tetrachlorophenol	58-90-2	1xE-02
Tetraethyl lead	78-00-2	4xE-06
Thiourea	62-56-6	2xE-04
Toluene	108-88-3	1xE+01
Toxaphene	8001-35-2	5xE-03
1,1,2-Trichloroethane	79-00-5	6xE-03
Trichloroethylene	79-01-6	5xE-03
Trichloromonofluoromethane	75-69-4	1xE+01
2,4,5-Trichlorophenol	95-95-4	4xE+00
2,4,6-Trichlorophenol	88-06-2	4xE+00
Vanadium pentoxide	1314-62-1	7xE-01
Vinyl chloride	75-01-4	2xE-03

Note 2: The levels specified in this appendix and the default level of 0.002 micrograms per kilogram or the level of detection for constituents as identified in Note 1 of this appendix are administratively stayed under the condition, for those constituents specified in Susection R315-266-112(b)(1), that the owner or operator complies with alternative levels defined as the land disposal restriction limits specified in Section R315-268-43 for F039 nonwastewaters. See Subsection R315-266-112(b)(2)(i).

R315-266-210. Appendix VIII to Rule R315-266 -- Organic Compounds for Which Residues Shall Be Analyzed.

Table

Volatiles
Benzene
Toluene
Carbon tetrachloride
Chloroform
Methylene chloride
Trichloroethylene
Tetra chloroethylene
1,1,1-Trichloroethane
Chlorobenzene
cis-1,4-Dichloro-2-butene
Bromochloromethane
Bromodichloromethane
Bromoform
Bromomethane
Methylene bromide
Methyl ethyl ketone
Semivolatiles
Bis(2-ethylhexyl)phthalate
Naphthalene
Phenol
Diethyl phthalate
Butyl benzyl phthalate
2,4-Dimethylphenol
o-Dichlorobenzene
m-Dichlorobenzene
p-Dichlorobenzene
Hexachlorobenzene
2,4,6-Trichlorophenol
Fluoranthene
o-Nitrophenol
1,2,4-Trichlorobenzene
o-Chlorophenol
Pentachlorophenol
Pyrene
Dimethyl phthalate
Mononitrobenzene
2,6-Toluene diisocyanate
Polychlorinated dibenzo-p-dioxins(1)
Polychlorinated dibenzo-furans(1)

(1) Analyses for polychlorinated dibenzo-p-dioxins and polychlorinated dibenzo-furans are required only for residues collected from areas downstream of the combustion chamber, e.g., ductwork, boiler tubes, heat exchange surfaces, air pollution control devices, etc.

Note to Appendix VIII: Analysis is not required for those compounds that do not have an established F039 nonwastewater concentration limit.

R315-266-211. Appendix IX to Rule R315-266 -- Methods Manual for Compliance With the BIF Regulations.

Appendix IX of 40 CFR 266, 2015 edition, is adopted and incorporated by reference.

R315-266-212. Appendix XI to Rule R315-266 -- Lead-Bearing Materials That May Be Processed in Exempt Lead Smelters.

A. Exempt Lead-Bearing Materials When Generated or Originally Produced By Lead-Associated Industries(1)

- Acid dump/fill solids
- Sump mud
- Materials from laboratory analyses
- Acid filters

*Note 1: The health-based concentration limits for appendix VIII Rule R315-261 constituents for which a health-based concentration is not provided below is 2xE-06 mg/kg.

Baghouse bags
 Clothing, e.g., coveralls, aprons, shoes, hats, gloves
 Sweepings
 Air filter bags and cartridges
 Respiratory cartridge filters
 Shop abrasives
 Stacking boards
 Waste shipping containers, e.g., cartons, bags, drums,
 cardboard
 Paper hand towels
 Wiping rags and sponges
 Contaminated pallets
 Water treatment sludges, filter cakes, residues, and solids
 Emission control dusts, sludges, filter cakes, residues, and
 solids from lead-associated industries, e.g., K069 and D008
 wastes
 Spent grids, posts, and separators
 Spent batteries
 Lead oxide and lead oxide residues
 Lead plates and groups
 Spent battery cases, covers, and vents
 Pasting belts
 Water filter media
 Cheesecloth from pasting rollers
 Pasting additive bags
 Asphalt paving materials
 B. Exempt Lead-Bearing Materials When Generated or
 Originally Produced By Any Industry
 Charging jumpers and clips
 Platen abrasive
 Fluff from lead wire and cable casings
 Lead-based pigments and compounding pigment dust
 (1) Lead-associated industries are lead smelters, lead-acid
 battery manufacturing, and lead chemical manufacturing, e.g.,
 manufacturing of lead oxide or other lead compounds.

R315-266-213. Appendix XII to Rule R315-266 -- Nickel or Chromium-Bearing Materials That May Be Processed in Exempt Nickel-Chromium Recovery Furnaces.

A. Exempt Nickel or Chromium-Bearing Materials when Generated by Manufacturers or Users of Nickel, Chromium, or Iron

Baghouse bags
 Raney nickel catalyst
 Floor sweepings
 Air filters
 Electroplating bath filters
 Wastewater filter media
 Wood pallets
 Disposable clothing (coveralls, aprons, hats, and gloves)
 Laboratory samples and spent chemicals
 Shipping containers and plastic liners from containers or
 vehicles used to transport nickel or chromium-containing wastes
 Respirator cartridge filters
 Paper hand towels
 B. Exempt Nickel or Chromium-Bearing Materials when
 Generated by Any Industry
 Electroplating wastewater treatment sludges (F006)
 Nickel and/or chromium-containing solutions
 Nickel, chromium, and iron catalysts
 Nickel-cadmium and nickel-iron batteries
 Filter cake from wet scrubber system water treatment plants
 in the specialty steel industry(1)
 Filter cake from nickel-chromium alloy pickling
 operations(1)
 (1) If a hazardous waste under an authorized State program.

R315-266-214. Appendix XIII to Rule R315-266 -- Mercury Bearing Wastes That May Be Processed in Exempt Mercury

Recovery Units.

These are exempt mercury-bearing materials with less than 500 ppm of Rule R315-261, appendix VIII organic constituents when generated by manufacturers or users of mercury or mercury products.

1. Activated carbon
2. Decomposer graphite
3. Wood
4. Paper
5. Protective clothing
6. Sweepings
7. Respiratory cartridge filters
8. Cleanup articles
9. Plastic bags and other contaminated containers
10. Laboratory and process control samples
11. K106 and other wastewater treatment plant sludge and filter cake
12. Mercury cell sump and tank sludge
13. Mercury cell process solids
14. Recoverable levels of mercury contained in soil

**KEY: hazardous waste
August 31, 2017**

**19-6-105
19-6-106**

R315. Environmental Quality, Waste Management and Radiation Control, Waste Management.

R315-268. Land Disposal Restrictions.

R315-268-1. Land Disposal Restrictions -- Purpose, Scope, and Applicability.

(a) Rule R315-268 identifies hazardous wastes that are restricted from land disposal and defines those limited circumstances under which an otherwise prohibited waste may continue to be land disposed.

(b) Except as specifically provided otherwise in Rule R315-268 or Rule R315-261, the requirements of Rule R315-268 apply to persons who generate or transport hazardous waste and owners and operators of hazardous waste treatment, storage, and disposal facilities.

(c) Restricted wastes may continue to be land disposed as follows:

(1) Where persons have been granted an extension to the effective date of a prohibition under Sections R315-268-20 through 39 or pursuant to Section R315-268-5, with respect to those wastes covered by the extension;

(2) Where persons have been granted an exemption from a prohibition pursuant to a petition under Section R315-268-6, with respect to those wastes and units covered by the petition;

(3) Wastes that are hazardous only because they exhibit a hazardous characteristic, and which are otherwise prohibited under Rule R315-268, or 40 CFR 148, are not prohibited if the wastes:

(i) Are disposed into a nonhazardous or hazardous injection well as defined under 40 CFR 146.6(a); and

(ii) Do not exhibit any prohibited characteristic of hazardous waste identified in Sections R315-261-20 through 24, at the point of injection.

(4) Wastes that are hazardous only because they exhibit a hazardous characteristic, and which are otherwise prohibited under Rule R315-268, are not prohibited if the wastes meet any of the following criteria, unless the wastes are subject to a specified method of treatment other than DEACT in Section R315-268-40, or are D003 reactive cyanide:

(i) The wastes are managed in a treatment system which subsequently discharges to waters of the U.S. pursuant to a permit issued under section 402 of the Clean Water Act; or

(ii) The wastes are treated for purposes of the pretreatment requirements of section 307 of the Clean Water Act; or

(iii) The wastes are managed in a zero discharge system engaged in Clean Water Act-equivalent treatment as defined in Subsection R315-268-37(a); and

(iv) The wastes no longer exhibit a prohibited characteristic at the point of land disposal, i.e., placement in a surface impoundment.

(d) The requirements of Rule R315-268 shall not affect the availability of a waiver under section 121(d)(4) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA).

(e) The following hazardous wastes are not subject to any provision of Rule R315-268:

(1) Waste generated by very small quantity generators, as defined in Section R315-260-10;

(2) Waste pesticides that a farmer disposes of pursuant to Section R315-262-70;

(3) Wastes identified or listed as hazardous after November 8, 1984 for which EPA has not promulgated land disposal prohibitions or treatment standards;

(4) De minimis losses of characteristic wastes to wastewaters are not considered to be prohibited wastes and are defined as losses from normal material handling operations, e.g., spills from the unloading or transfer of materials from bins or other containers, leaks from pipes, valves or other devices used to transfer materials; minor leaks of process equipment, storage tanks or containers; leaks from well-maintained pump packings

and seals; sample purgings; and relief device discharges; discharges from safety showers and rinsing and cleaning of personal safety equipment; rinsate from empty containers or from containers that are rendered empty by that rinsing; and laboratory wastes not exceeding one per cent of the total flow of wastewater into the facility's headworks on an annual basis, or with a combined annualized average concentration not exceeding one part per million in the headworks of the facility's wastewater treatment or pretreatment facility.

(f) Universal waste handlers and universal waste transporters, as defined in Section R315-260-10, are exempt from Sections R315-268-7 and 268-50 for the hazardous wastes listed below. These handlers are subject to regulation under Rule R315-273.

(1) Batteries as described in Section R315-273-2;

(2) Pesticides as described in Section R315-273-3;

(3) Mercury-containing equipment as described in Section R315-273-4; and

(4) Lamps as described in Section R315-273-5.

R315-268-2. Land Disposal Restrictions -- Definitions Applicable in Rule R315-268.

When used in Rule R315-268 the following terms have the meanings given below:

(a) Halogenated organic compounds or HOCs means those compounds having a carbon-halogen bond which are listed under appendix III to Rule R315-268.

(b) Hazardous constituent or constituents means those constituents listed in appendix VIII to Rule R315-261.

(c) Land disposal means placement in or on the land, except in a corrective action management unit or staging pile, and includes, but is not limited to, placement in a landfill, surface impoundment, waste pile, injection well, land treatment facility, salt dome formation, salt bed formation, underground mine or cave, or placement in a concrete vault, or bunker intended for disposal purposes.

(d) Nonwastewaters are wastes that do not meet the criteria for wastewaters in Subsection R315-268-2(f).

(e) Polychlorinated biphenyls or PCBs are halogenated organic compounds defined in accordance with 40 CFR 761.3.

(f) Wastewaters are wastes that contain less than 1% by weight total organic carbon (TOC) and less than 1% by weight total suspended solids (TSS).

(g) Debris means solid material exceeding a 60 mm particle size that is intended for disposal and that is: A manufactured object; or plant or animal matter; or natural geologic material. However, the following materials are not debris: any material for which a specific treatment standard is provided in Sections R315-268-40 through 49, namely lead acid batteries, cadmium batteries, and radioactive lead solids; process residuals such as smelter slag and residues from the treatment of waste, wastewater, sludges, or air emission residues; and intact containers of hazardous waste that are not ruptured and that retain at least 75% of their original volume. A mixture of debris that has not been treated to the standards provided by Section R315-268-45 and other material is subject to regulation as debris if the mixture is comprised primarily of debris, by volume, based on visual inspection.

(h) Hazardous debris means debris that contains a hazardous waste listed in Sections R315-261-30 through 35, or that exhibits a characteristic of hazardous waste identified in Sections R315-261-20 through 24. Any deliberate mixing of prohibited hazardous waste with debris that changes its treatment classification, i.e., from waste to hazardous debris, is not allowed under the dilution prohibition in Section R315-268-3.

(i) Underlying hazardous constituent means any constituent listed in Section R315-268-48, Table UTS-Universal Treatment Standards, except fluoride, selenium, sulfides,

vanadium, and zinc, which can reasonably be expected to be present at the point of generation of the hazardous waste at a concentration above the constituent-specific UTS treatment standards.

(j) Inorganic metal-bearing waste is one for which EPA has established treatment standards for metal hazardous constituents, and which does not otherwise contain significant organic or cyanide content as described in Subsection R315-268-3(c)(1), and is specifically listed in appendix XI of Rule R315-268.

(k) Soil means unconsolidated earth material composing the superficial geologic strata, material overlying bedrock, consisting of clay, silt, sand, or gravel size particles as classified by the U.S. Natural Resources Conservation Service, or a mixture of such materials with liquids, sludges or solids which is inseparable by simple mechanical removal processes and is made up primarily of soil by volume based on visual inspection. Any deliberate mixing of prohibited hazardous waste with soil that changes its treatment classification, i.e., from waste to contaminated soil, is not allowed under the dilution prohibition in Section R315-268-3.

R315-268-3. Land Disposal Restrictions -- Dilution Prohibited As a Substitute for Treatment.

(a) Except as provided in Subsection R315-268-3(b), no generator, transporter, handler, or owner or operator of a treatment, storage, or disposal facility shall in any way dilute a restricted waste or the residual from treatment of a restricted waste as a substitute for adequate treatment to achieve compliance with Sections R315-268-40 through 49, to circumvent the effective date of a prohibition in Sections R315-268-20 through 39, to otherwise avoid a prohibition in Sections R315-268-20 through 39, or to circumvent a land disposal prohibition imposed by RCRA section 3004.

(b) Dilution of wastes that are hazardous only because they exhibit a characteristic in treatment systems which include land-based units which treat wastes subsequently discharged to a water of the United States pursuant to a permit issued under section 402 of the Clean Water Act (CWA), or which treat wastes in a CWA-equivalent treatment system, or which treat wastes for the purposes of pretreatment requirements under section 307 of the CWA is not impermissible dilution for purposes of Section R315-268-3 unless a method other than DEACT has been specified in Section R315-268-40 as the treatment standard, or unless the waste is a D003 reactive cyanide wastewater or nonwastewater.

(c) Combustion of the hazardous waste codes listed in Appendix XI of Rule R315-268 is prohibited, unless the waste, at the point of generation, or after any bona fide treatment such as cyanide destruction prior to combustion, can be demonstrated to comply with one or more of the following criteria, unless otherwise specifically prohibited from combustion:

(1) The waste contains hazardous organic constituents or cyanide at levels exceeding the constituent-specific treatment standard found in Section R315-268-48;

(2) The waste consists of organic, debris-like materials, e.g., wood, paper, plastic, or cloth, contaminated with an inorganic metal-bearing hazardous waste;

(3) The waste, at point of generation, has reasonable heating value such as greater than or equal to 5000 BTU per pound;

(4) The waste is co-generated with wastes for which combustion is a required method of treatment;

(5) The waste is subject to Federal and/or State requirements necessitating reduction of organics, including biological agents; or

(6) The waste contains greater than 1% Total Organic Carbon (TOC).

(d) It is a form of impermissible dilution, and therefore

prohibited, to add iron filings or other metallic forms of iron to lead-containing hazardous wastes in order to achieve any land disposal restriction treatment standard for lead. Lead-containing wastes include D008 wastes, wastes exhibiting a characteristic due to the presence of lead, all characteristic wastes containing lead as an underlying hazardous constituent, listed wastes containing lead as a regulated constituent, and hazardous media containing any of the aforementioned lead-containing wastes.

R315-268-4. Land Disposal Restrictions -- Treatment Surface Impoundment Exemption.

(a) Wastes which are otherwise prohibited from land disposal under Rule R315-268 may be treated in a surface impoundment or series of impoundments provided that:

(1) Treatment of such wastes occurs in the impoundments;

(2) The following conditions are met:

(i) Sampling and testing. For wastes with treatment standards in Sections R315-268-40 through 49 and/or prohibition levels in Sections R315-268-20 through 39 or RCRA section 3004(d), the residues from treatment are analyzed, as specified in Sections R315-268-7 or 268-32, to determine if they meet the applicable treatment standards or where no treatment standards have been established for the waste, the applicable prohibition levels. The sampling method, specified in the waste analysis plan under Section R315-264-13 or 40 CFR 265.13, which is adopted by reference, shall be designed such that representative samples of the sludge and the supernatant are tested separately rather than mixed to form homogeneous samples.

(ii) Removal. The following treatment residues, including any liquid waste, shall be removed at least annually; residues which do not meet the treatment standards promulgated under Sections R315-268-40 through 49; residues which do not meet the prohibition levels established under Sections R315-268-20 through 39 or imposed by statute, where no treatment standards have been established; residues which are from the treatment of wastes prohibited from land disposal under Sections R315-268-20 through 39, where no treatment standards have been established and no prohibition levels apply; or residues from managing listed wastes which are not delisted under Section R315-260-22. If the volume of liquid flowing through the impoundment or series of impoundments annually is greater than the volume of the impoundment or impoundments, this flow-through constitutes removal of the supernatant for the purpose of this requirement.

(iii) Subsequent management. Treatment residues may not be placed in any other surface impoundment for subsequent management.

(iv) Recordkeeping. Sampling and testing and recordkeeping provisions of Section R315-264-13 and 40 CFR 265.13, which is adopted by reference, apply.

(3) The impoundment meets the design requirements of Section R315-264-221(c) or 40 CFR 265.221(a), which is adopted by reference, regardless that the unit may not be new, expanded, or a replacement, and be in compliance with applicable ground water monitoring requirements of Sections R315-264-90 through 101 or 40 CFR 265.90 through 94, which are adopted by reference, unless:

(i) Exempted pursuant to Sections R315-264-221 (d) or (e), or to 40 CFR 265.221(c) or (d), which are adopted by reference; or,

(ii) Upon application by the owner or operator, the Director, after notice and an opportunity to comment, has granted a waiver of the requirements on the basis that the surface impoundment:

(A) Has at least one liner, for which there is no evidence that such liner is leaking;

(B) Is located more than one-quarter mile from an underground source of drinking water; and

(C) Is in compliance with generally applicable ground water monitoring requirements for facilities with permits; or,

(iii) Upon application by the owner or operator, the Director, after notice and an opportunity to comment, has granted a modification to the requirements on the basis of a demonstration that the surface impoundment is located, designed, and operated so as to assure that there will be no migration of any hazardous constituent into ground water or surface water at any future time.

(4) The owner or operator submits to the Director a written certification that the requirements of Section R315-268-4(a)(3) have been met. The following certification is required:

I certify under penalty of law that the requirements of Section R315-268-4(a)(3) have been met for all surface impoundments being used to treat restricted wastes. I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

(b) Evaporation of hazardous constituents as the principal means of treatment is not considered to be treatment for purposes of an exemption under Section R315-268-4.

R315-268-5. Land Disposal Restrictions -- Procedures for Case-by-Case Extensions to an Effective Date.

Note to Sections R315-268-5. All references to administrative positions and to regulations are to the positions and regulations of the US Environmental Protection Agency. Utah does not administer Section R315-268-5.

(a) Any person who generates, treats, stores, or disposes of a hazardous waste may submit an application to the Administrator for an extension to the effective date of any applicable restriction established under Sections R315-268-20 through 39. The applicant shall demonstrate the following:

(1) He has made a good-faith effort to locate and contract with treatment, recovery, or disposal facilities nationwide to manage his waste in accordance with the effective date of the applicable restriction established under Sections R315-268-20 through 39;

(2) He has entered into a binding contractual commitment to construct or otherwise provide alternative treatment, recovery (e.g., recycling), or disposal capacity that meets the treatment standards specified in Sections R315-268-40 through 49 or, where treatment standards have not been specified, such treatment, recovery, or disposal capacity is protective of human health and the environment.

(3) Due to circumstances beyond the applicant's control, such alternative capacity cannot reasonably be made available by the applicable effective date. This demonstration may include a showing that the technical and practical difficulties associated with providing the alternative capacity will result in the capacity not being available by the applicable effective date;

(4) The capacity being constructed or otherwise provided by the applicant shall be sufficient to manage the entire quantity of waste that is the subject of the application;

(5) He provides a detailed schedule for obtaining required operating and construction permits or an outline of how and when alternative capacity will be available;

(6) He has arranged for adequate capacity to manage his waste during an extension and has documented in the application the location of all sites at which the waste will be managed; and

(7) Any waste managed in a surface impoundment or landfill during the extension period shall meet the requirements of Subsection R315-268-5(h)(2).

(b) An authorized representative signing an application described under Subsection R315-268-5(a) shall make the following certification:

I certify under penalty of law that I have personally

examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

(c) After receiving an application for an extension, the Administrator may request any additional information which he deems as necessary to evaluate the application.

(d) An extension shall apply only to the waste generated at the individual facility covered by the application and shall not apply to restricted waste from any other facility.

(e) On the basis of the information referred to in Subsection R315-268-5(a), after notice and opportunity for comment, and after consultation with appropriate State agencies in all affected States, the Administrator may grant an extension of up to 1 year from the effective date. The Administrator may renew this extension for up to 1 additional year upon the request of the applicant if the demonstration required in Subsection R315-268-5 (a) can still be made. In no event shall an extension extend beyond 24 months from the applicable effective date specified in Sections R315-268-20 through 39. The length of any extension authorized shall be determined by the Administrator based on the time required to construct or obtain the type of capacity needed by the applicant as described in the completion schedule discussed in Subsection R315-268-5(a)(5). The Administrator shall give public notice of the intent to approve or deny a petition and provide an opportunity for public comment. The final decision on a petition shall be published in the Federal Register.

(f) Any person granted an extension under Section R315-268-5 shall immediately notify the Administrator as soon as he has knowledge of any change in the conditions certified to in the application.

(g) Any person granted an extension Section R315-268-5 shall submit written progress reports at intervals designated by the Administrator. Such reports shall describe the overall progress made toward constructing or otherwise providing alternative treatment, recovery or disposal capacity; shall identify any event which may cause or has caused a delay in the development of the capacity; and shall summarize the steps taken to mitigate the delay. The Administrator can revoke the extension at any time if the applicant does not demonstrate a good-faith effort to meet the schedule for completion, if the Agency denies or revokes any required permit, if conditions certified in the application change, or for any violation of Rules R315-260 through 266, 268, 270, 273, 124,15, and 101.

(h) Whenever the Administrator establishes an extension to an effective date under this section, during the period for which such extension is in effect:

(1) The storage restrictions under Subsection R315-268-50(a) do not apply; and

(2) Such hazardous waste may be disposed in a landfill or surface impoundment only if such unit is in compliance with the technical requirements of the following provisions regardless of whether such unit is existing, new, or a replacement or lateral expansion.

(i) The landfill, if in interim status, is in compliance with the requirements of subpart F of 40 CFR 265 and 40 CFR 265.301(a), (c), and (d) that is adopted by reference in Rule R315-265; or,

(ii) The landfill, if permitted, is in compliance with the requirements of Sections R315-264-90 through 101 and Subsections R315-264-301(c), (d) and (e); or

(iii) The surface impoundment, if in interim status, is in compliance with the requirements of subpart F of 40 CFR 265, 40 CFR 265.221(a),(c), and (d) that are adopted by reference in Rule R315-265, and RCRA section 3005(j)(1); or

(iv) The surface impoundment, if permitted, is in compliance with the requirements of Sections R315-264-90 through 101 and Subsections R315-264-221(c), (d) and (e); or

(v) The surface impoundment, if newly subject to RCRA section 3005(j)(1) due to the promulgation of additional listings or characteristics for the identification of hazardous waste, is in compliance with the requirements of subpart F of 40 CFR 265 that is adopted by reference in Rule R315-265 within 12 months after the promulgation of additional listings or characteristics of hazardous waste, and with the requirements of 40 CFR 265.221(a), (c) and (d) that is adopted by reference in Rule R315-265 within 48 months after the promulgation of additional listings or characteristics of hazardous waste. If a national capacity variance is granted, during the period the variance is in effect, the surface impoundment, if newly subject to RCRA section 3005(j)(1) due to the promulgation of additional listings or characteristics of hazardous waste, is in compliance with the requirements of subpart F of 40 CFR 265 that is adopted by reference in Rule R315-265 within 12 months after the promulgation of additional listings or characteristics of hazardous waste, and with the requirements of 40 CFR 265.221(a), (c) and (d) that is adopted by reference in Rule R315-265 within 48 months after the promulgation of additional listings or characteristics of hazardous waste; or

(vi) The landfill, if disposing of containerized liquid hazardous wastes containing PCBs at concentrations greater than or equal to 50 ppm but less than 500 ppm, is also in compliance with the requirements of 40 CFR 761.75 and Rules R264 and 265.

(i) Pending a decision on the application the applicant is required to comply with all restrictions on land disposal under Rule R315-268 once the effective date for the waste has been reached.

R315-268-6. Land Disposal Restrictions -- Petitions to Allow Land Disposal of a Waste Prohibited Under Sections R315-268-20 through 39.

Note to Section R315-268-6. All references to administrative positions and to regulations are to the positions and regulations of the US Environmental Protection Agency. Utah does not administer Section R315-268-6.

(a) Any person seeking an exemption from a prohibition under Sections R315-268-20 through 39 for the disposal of a restricted hazardous waste in a particular unit or units shall submit a petition to the Administrator demonstrating, to a reasonable degree of certainty, that there will be no migration of hazardous constituents from the disposal unit or injection zone for as long as the wastes remain hazardous. The demonstration shall include the following components:

(1) An identification of the specific waste and the specific unit for which the demonstration will be made;

(2) A waste analysis to describe fully the chemical and physical characteristics of the subject waste;

(3) A comprehensive characterization of the disposal unit site including an analysis of background air, soil, and water quality.

(4) A monitoring plan that detects migration at the earliest practicable time;

(5) Sufficient information to assure the Administrator that the owner or operator of a land disposal unit receiving restricted waste(s) shall comply with other applicable Federal, State, and local laws.

(b) The demonstration referred to in Subsection R315-268-6(a) shall meet the following criteria:

(1) All waste and environmental sampling, test, and analysis data shall be accurate and reproducible to the extent that state-of-the-art techniques allow;

(2) All sampling, testing, and estimation techniques for chemical and physical properties of the waste and all

environmental parameters shall have been approved by the Administrator;

(3) Simulation models shall be calibrated for the specific waste and site conditions, and verified for accuracy by comparison with actual measurements;

(4) A quality assurance and quality control plan that addresses all aspects of the demonstration shall be approved by the Administrator; and,

(5) An analysis shall be performed to identify and quantify any aspects of the demonstration that contribute significantly to uncertainty. This analysis shall include an evaluation of the consequences of predictable future events, including, but not limited to, earthquakes, floods, severe storm events, droughts, or other natural phenomena.

(c) Each petition referred to in Subsection R315-268-6(a) shall include the following:

(1) A monitoring plan that describes the monitoring program installed at and/or around the unit to verify continued compliance with the conditions of the variance. This monitoring plan shall provide information on the monitoring of the unit and/or the environment around the unit. The following specific information shall be included in the plan:

(i) The media monitored in the cases where monitoring of the environment around the unit is required;

(ii) The type of monitoring conducted at the unit, in the cases where monitoring of the unit is required;

(iii) The location of the monitoring stations;

(iv) The monitoring interval (frequency of monitoring at each station);

(v) The specific hazardous constituents to be monitored;

(vi) The implementation schedule for the monitoring program;

(vii) The equipment used at the monitoring stations;

(viii) The sampling and analytical techniques employed; and

(ix) The data recording/reporting procedures.

(2) Where applicable, the monitoring program described in Subsection R315-268-6(c)(1) shall be in place for a period of time specified by the Administrator, as part of his approval of the petition, prior to receipt of prohibited waste at the unit.

(3) The monitoring data collected according to the monitoring plan specified under Subsection R315-268-6(c)(1) shall be sent to the Administrator according to a format and schedule specified and approved in the monitoring plan, and

(4) A copy of the monitoring data collected under the monitoring plan specified under Subsection R315-268-6(c)(1) shall be kept on-site at the facility in the operating record.

(5) The monitoring program specified under Subsection R315-268-6(c)(1) meets the following criteria:

(i) All sampling, testing, and analytical data shall be approved by the Administrator and shall provide data that is accurate and reproducible.

(ii) All estimation and monitoring techniques shall be approved by the Administrator.

(iii) A quality assurance and quality control plan addressing all aspects of the monitoring program shall be provided to and approved by the Administrator.

(d) Each petition shall be submitted to the Administrator.

(e) After a petition has been approved, the owner or operator shall report any changes in conditions at the unit and/or the environment around the unit that significantly depart from the conditions described in the variance and affect the potential for migration of hazardous constituents from the units as follows:

(1) If the owner or operator plans to make changes to the unit design, construction, or operation, such a change shall be proposed, in writing, and the owner or operator shall submit a demonstration to the Administrator at least 30 days prior to making the change. The Administrator shall determine whether

the proposed change invalidates the terms of the petition and shall determine the appropriate response. Any change shall be approved by the Administrator prior to being made.

(2) If the owner or operator discovers that a condition at the site which was modeled or predicted in the petition does not occur as predicted, this change shall be reported, in writing, to the Administrator within 10 days of discovering the change. The Administrator shall determine whether the reported change from the terms of the petition requires further action, which may include termination of waste acceptance and revocation of the petition, petition modifications, or other responses.

(f) If the owner or operator determines that there is migration of hazardous constituent(s) from the unit, the owner or operator shall:

(1) Immediately suspend receipt of prohibited waste at the unit, and

(2) Notify the Administrator, in writing, within 10 days of the determination that a release has occurred.

(3) Following receipt of the notification the Administrator shall determine, within 60 days of receiving notification, whether the owner or operator can continue to receive prohibited waste in the unit and whether the variance is to be revoked. The Administrator shall also determine whether further examination of any migration is warranted under applicable provisions of Rules R315-264 or 265.

(g) Each petition shall include the following statement signed by the petitioner or an authorized representative:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this petition and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

(h) After receiving a petition, the Administrator may request any additional information that reasonably may be required to evaluate the demonstration.

(i) If approved, the petition shall apply to land disposal of the specific restricted waste at the individual disposal unit described in the demonstration and shall not apply to any other restricted waste at that disposal unit, or to that specific restricted waste at any other disposal unit.

(j) The Administrator shall give public notice in the Federal Register of the intent to approve or deny a petition and provide an opportunity for public comment. The final decision on a petition shall be published in the Federal Register.

(k) The term of a petition granted under Section R315-268-6 shall be no longer than the term of the hazardous waste permit if the disposal unit is operating under a hazardous waste permit, or up to a maximum of 10 years from the date of approval provided under Subsection R315-268-6(g) if the unit is operating under interim status. In either case, the term of the granted petition shall expire upon the termination or denial of a hazardous waste permit, or upon the termination of interim status or when the volume limit of waste to be land disposed during the term of petition is reached.

(l) Prior to the Administrator's decision, the applicant is required to comply with all restrictions on land disposal under Rule R315-268 once the effective date for the waste has been reached.

(m) The petition granted by the Administrator does not relieve the petitioner of his responsibilities in the management of hazardous waste under Rules R315-260 through part 270.

(n) Liquid hazardous wastes containing polychlorinated biphenyls at concentrations greater than or equal to 500 ppm are not eligible for an exemption under Section R315-268-6.

R315-268-7. Land Disposal Restrictions -- Testing,

Tracking, and Recordkeeping Requirements for Generators, Treaters, and Disposal Facilities.

(a) Requirements for generators:

(1) A generator of hazardous waste shall determine if the waste has to be treated before it can be land disposed. This is done by determining if the hazardous waste meets the treatment standards in Sections R315-268-40, 45, or 49. This determination can be made concurrently with the hazardous waste determination required in Section R315-262-11, in either of two ways: testing the waste or using knowledge of the waste. If the generator tests the waste, testing would normally determine the total concentration of hazardous constituents, or the concentration of hazardous constituents in an extract of the waste obtained using test method 1311 in "Test Methods of Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, incorporated by reference, see Section R315-260-11, depending on whether the treatment standard for the waste is expressed as a total concentration or concentration of hazardous constituent in the waste's extract. Alternatively, the generator shall send the waste to a hazardous waste treatment facility permitted under Section 19-6-108, where the waste treatment facility shall comply with the requirements of Section R315-264-13 and Subsection R315-268-7(b). In addition, some hazardous wastes shall be treated by particular treatment methods before they can be land disposed and some soils are contaminated by such hazardous wastes. These treatment standards are also found in Section R315-268-40, and are described in detail in Section R315-268-42, Table 1. These wastes, and soils contaminated with such wastes, do not need to be tested, however, if they are in a waste mixture, other wastes with concentration level treatment standards would have to be tested. If a generator determines they are managing a waste or soil contaminated with a waste, that displays a hazardous characteristic of ignitability, corrosivity, reactivity, or toxicity, they shall comply with the special requirements of Section R315-268-9 in addition to any applicable requirements in Section R315-268-7.

(2) If the waste or contaminated soil does not meet the treatment standards, or if the generator chooses not to make the determination of whether his waste shall be treated, with the initial shipment of waste to each treatment or storage facility, the generator shall send a one-time written notice to each treatment or storage facility receiving the waste, and place a copy in the file. The notice shall include the information in column "268-7(a)(2)" of the Generator Paperwork Requirements Table in Subsection R315-268-7(a)(4). Alternatively, if the generator chooses not to make the determination of whether the waste shall be treated, the notification shall include the EPA Hazardous Waste Numbers and Manifest Number of the first shipment and shall state "This hazardous waste may or may not be subject to the LDR treatment standards. The treatment facility shall make the determination." No further notification is necessary until such time that the waste or facility change, in which case a new notification shall be sent and a copy placed in the generator's file.

(3) If the waste or contaminated soil meets the treatment standard at the original point of generation:

(i) With the initial shipment of waste to each treatment, storage, or disposal facility, the generator shall send a one-time written notice to each treatment, storage, or disposal facility receiving the waste, and place a copy in the file. The notice shall include the information indicated in column "268-7(a)(3)" of the Generator Paperwork Requirements Table in Subsection R315-268-7(a)(4) and the following certification statement, signed by an authorized representative:

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment

standards specified in Sections R315-268-40 through 49. I believe that the information I submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment.

(ii) For contaminated soil, with the initial shipment of wastes to each treatment, storage, or disposal facility, the generator shall send a one-time written notice to each facility receiving the waste and place a copy in the file. The notice shall include the information in column "268-7(a)(3)" of the Generator Paperwork Requirements Table in Subsection R315-268-7(a)(4).

(iii) If the waste changes, the generator shall send a new notice and certification to the receiving facility, and place a copy in their files. Generators of hazardous debris excluded from the definition of hazardous waste under Subsection R315-261-3(f) are not subject to these requirements.

(4) For reporting, tracking, and recordkeeping when exceptions allow certain wastes or contaminated soil that do not meet the treatment standards to be land disposed: There are certain exemptions from the requirement that hazardous wastes or contaminated soil meet treatment standards before they can be land disposed. These include, but are not limited to case-by-case extensions under Section R315-268-5, disposal in a non-migration unit under Section R315-268-6, or a national capacity variance or case-by-case capacity variance under Sections R315-268-20 through 39. If a generator's waste is so exempt, then with the initial shipment of waste, the generator shall send a one-time written notice to each land disposal facility receiving the waste. The notice shall include the information indicated in column "268-7(a)(4)" of the Generator Paperwork Requirements Table below. If the waste changes, the generator shall send a new notice to the receiving facility, and place a copy in their files.

TABLE 1

Generator Paperwork Requirements

Required information	268-7 (a) (2)	268-7 (a) (3)	268-7 (a) (4)	268-7 (a) (9)
1. EPA Hazardous Waste Numbers and Manifest Number of first shipment	X	X	X	X
2. Statement: this waste is not prohibited from land disposal			X	
3. The waste is subject to the LDRs. The constituents of concern for F001-F005, and F039, and underlying hazardous constituents in characteristic wastes, unless the waste will be treated and monitored for all constituents. If all constituents will be treated and monitored, there is no need to put them all on the LDR notice	X	X		
4. The notice shall include the applicable wastewater/nonwastewater category (see Section R315-268-2(d) and (f)) and subdivisions made within a waste code based on waste-specific criteria (such as D003 reactive cyanide)	X	X		
5. Waste analysis data, when available	X	X	X	
6. Date the waste is subject to the prohibition			X	
7. For hazardous debris, when treating with the alternative treatment technologies provided by Section R315-268-45: the contaminants subject to treatment, as described in Section R315-268-45(b); and an indication that these contaminants are being treated	X		X	

to comply with Section R315-268-45

8. For contaminated soil subject to LDRs as provided in Section R315-268-49(a), the constituents subject to treatment as described in Section R315-268-49(d), and the following statement: This contaminated soil, does/does not, contain listed hazardous waste and, does/does not, exhibit a characteristic of hazardous waste and, is subject to/complies with, the soil treatment standards as provided by Section R315-268-49(c) or the universal treatment standards	X	X		
9. A certification is needed, see applicable section for exact wording		X		X

(5) If a generator is managing and treating prohibited waste or contaminated soil in tanks, containers, or containment buildings regulated under Sections R315-262-15, 16, and 17 to meet applicable LDR treatment standards found at Section R315-268-40, the generator shall develop and follow a written waste analysis plan which describes the procedures it will carry out to comply with the treatment standards. Generators treating hazardous debris under the alternative treatment standards of Table 1 to Section R315-268-45, however, are not subject to these waste analysis requirements. The plan must be kept on site in the generator's records, and the following requirements must be met:

(i) The waste analysis plan shall be based on a detailed chemical and physical analysis of a representative sample of the prohibited waste(s) being treated, and contain all information necessary to treat the waste(s) in accordance with the requirements of Rule R315-268, including the selected testing frequency.

(ii) Such plan shall be kept in the facility's on-site files and made available to inspectors.

(iii) Wastes shipped off-site pursuant to Subsection R315-268-7(a) shall comply with the notification requirements of Subsection R315-268-7(a)(3).

(6) If a generator determines that the waste or contaminated soil is restricted based solely on his knowledge of the waste, all supporting data used to make this determination shall be retained on-site in the generator's files. If a generator determines that the waste is restricted based on testing this waste or an extract developed using the test method 1311 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as referenced in Section R315-260-11, and all waste analysis data shall be retained on-site in the generator's files.

(7) If a generator determines that he is managing a prohibited waste that is excluded from the definition of hazardous or solid waste or is exempted from regulation under Sections R315-261-2 through 6 subsequent to the point of generation, including deactivated characteristic hazardous wastes managed in wastewater treatment systems subject to the Clean Water Act (CWA) as specified at Subsection R315-261-4(a)(2) or that are CWA-equivalent, or are managed in an underground injection well regulated by the SDWA, he shall place a one-time notice describing such generation, subsequent exclusion from the definition of hazardous or solid waste or exemption from regulation under Sections R315-261-2 through 6, and the disposition of the waste, in the facility's on-site files.

(8) Generators shall retain on-site a copy of all notices, certifications, waste analysis data, and other documentation produced pursuant to Section R315-268-7 for at least three years from the date that the waste that is the subject of such documentation was last sent to on-site or off-site treatment,

storage, or disposal. The three year record retention period is automatically extended during the course of any unresolved enforcement action regarding the regulated activity or as requested by the Director. The requirements of Subsection R315-268-7(a) apply to solid wastes even when the hazardous characteristic is removed prior to disposal, or when the waste is excluded from the definition of hazardous or solid waste under Sections R315-261-2 through 6, or exempted from hazardous waste regulation, subsequent to the point of generation.

(9) If a generator is managing a lab pack containing hazardous wastes and wishes to use the alternative treatment standard for lab packs found at Subsection R315-268-42(c):

(i) With the initial shipment of waste to a treatment facility, the generator shall submit a notice that provides the information in column "268-7(a)(9)" in the Generator Paperwork Requirements Table of Subsection R315-268-7(a)(4), and the following certification. The certification, which shall be signed by an authorized representative and shall be placed in the generator's files, shall say the following:

I certify under penalty of law that I personally have examined and am familiar with the waste and that the lab pack contains only wastes that have not been excluded under appendix IV to Rule R315-268 and that this lab pack will be sent to a combustion facility in compliance with the alternative treatment standards for lab packs at Subsection R315-268-42(c). I am aware that there are significant penalties for submitting a false certification, including the possibility of fine or imprisonment.

(ii) No further notification is necessary until such time that the wastes in the lab pack change, or the receiving facility changes, in which case a new notice and certification shall be sent and a copy placed in the generator's file.

(iii) If the lab pack contains characteristic hazardous wastes, D001-D043 excluding D009, underlying hazardous constituents, as defined in Subsection R315-268-2(i) need not be determined.

(iv) The generator shall also comply with the requirements in Subsections R315-268-7(a)(6) and (a)(7).

(10) Small quantity generators with tolling agreements pursuant to Subsection R315-262-20(e) shall comply with the applicable notification and certification requirements of Subsection R315-268-7(a) for the initial shipment of the waste subject to the agreement. Such generators shall retain on-site a copy of the notification and certification, together with the tolling agreement, for at least three years after termination or expiration of the agreement. The three-year record retention period is automatically extended during the course of any unresolved enforcement action regarding the regulated activity or as requested by the Director.

(b) Treatment facilities shall test their wastes according to the frequency specified in their waste analysis plans as required by Section R315-264-13, for permitted TSDs, or 40 CFR 265.13, which is adopted by reference, for interim status facilities. Such testing shall be performed as provided in Subsections R315-268-7(b)(1), (b)(2) and (b)(3).

(1) For wastes or contaminated soil with treatment standards expressed in the waste extract (TCLP), the owner or operator of the treatment facility shall test an extract of the treatment residues, using test method 1311, the Toxicity Characteristic Leaching Procedure, described in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846 as incorporated by reference in Section R315-260-11, to assure that the treatment residues extract meet the applicable treatment standards.

(2) For wastes or contaminated soil with treatment standards expressed as concentrations in the waste, the owner or operator of the treatment facility shall test the treatment residues, not an extract of such residues, to assure that they meet the applicable treatment standards.

(3) A one-time notice shall be sent with the initial shipment of waste or contaminated soil to the land disposal facility. A copy of the notice shall be placed in the treatment facility's file.

(i) No further notification is necessary until such time that the waste or receiving facility change, in which case a new notice shall be sent and a copy placed in the treatment facility's file.

(ii) The one-time notice shall include these requirements:

TABLE 2

Treatment Facility Paperwork Requirements

Required information	268-7(b)
1. EPA Hazardous Waste Numbers and Manifest Number of first shipment	X
2. The waste is subject to the LDRs. The constituents of concern for F001-F005, and F039, and underlying hazardous constituents in characteristic wastes, unless the waste will be treated and monitored for all constituents. If all constituents will be treated and monitored, there is no need to put them all on the LDR notice.	X
3. The notice shall include the applicable wastewater/ nonwastewater category, see Subsections R315-268-2(d) and (f)) and subdivisions made within a waste code based on waste-specific criteria, such as D003 reactive cyanide	X
4. Waste analysis data, when available	X
5. For contaminated soil subject to LDRs as provided in Subsection R315-268-49(a), the constituents subject to treatment as described in Subsection R315-268-49(d) and the following statement, "this contaminated soil, does/does not, exhibit a characteristic of hazardous waste and, is subject to/complies with, the soil treatment standards as provided by Subsection R315-268-49(c)".	X
6. A certification is needed, see applicable section for exact wording	X

(4) The treatment facility shall submit a one-time certification signed by an authorized representative with the initial shipment of waste or treatment residue of a restricted waste to the land disposal facility. The certification shall state:

I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification. Based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly so as to comply with the treatment standards specified in Section R315-268-40 without impermissible dilution of the prohibited waste. I am aware there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

A certification is also necessary for contaminated soil and it shall state:

I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and believe that it has been maintained and operated properly so as to comply with treatment standards specified in Section R315-268-49 without impermissible dilution of the prohibited wastes. I am aware there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

(i) A copy of the certification shall be placed in the treatment facility's on-site files. If the waste or treatment residue changes, or the receiving facility changes, a new certification shall be sent to the receiving facility, and a copy placed in the file.

(ii) Debris excluded from the definition of hazardous waste under Subsection R315-261-3(f), i.e., debris treated by an extraction or destruction technology provided by Table 1,

Section R315-268-45, and debris that the Director has determined does not contain hazardous waste, however, is subject to the notification and certification requirements of Subsection R315-268-7(d) rather than the certification requirements of Subsection R315-268-7(b).

(iii) For wastes with organic constituents having treatment standards expressed as concentration levels, if compliance with the treatment standards is based in whole or in part on the analytical detection limit alternative specified in Subsection R315-268-40(d), the certification, signed by an authorized representative, shall state the following:

I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification. Based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the nonwastewater organic constituents have been treated by combustion units as specified in Section R315-268-42, Table 1. I have been unable to detect the nonwastewater organic constituents, despite having used best good-faith efforts to analyze for such constituents. I am aware there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

(iv) For characteristic wastes that are subject to the treatment standards in Section R315-268-40, other than those expressed as a method of treatment, or Section R315-268-49, and that contain underlying hazardous constituents as defined in Subsection R315-268-2(i); if these wastes are treated on-site to remove the hazardous characteristic; and are then sent off-site for treatment of underlying hazardous constituents, the certification shall state the following:

I certify under penalty of law that the waste has been treated in accordance with the requirements of Section R315-268-40 or 49 to remove the hazardous characteristic. This decharacterized waste contains underlying hazardous constituents that require further treatment to meet treatment standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

(v) For characteristic wastes that contain underlying hazardous constituents as defined Subsection R315-268-2(i) that are treated on-site to remove the hazardous characteristic to treat underlying hazardous constituents to levels in Section R315-268-48 Universal Treatment Standards, the certification shall state the following:

I certify under penalty of law that the waste has been treated in accordance with the requirements of Section R315-268-40 to remove the hazardous characteristic and that underlying hazardous constituents, as defined in Subsection R315-268-2(i) have been treated on-site to meet the Section R315-268-48 Universal Treatment Standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

(5) If the waste or treatment residue will be further managed at a different treatment, storage, or disposal facility, the treatment, storage, or disposal facility sending the waste or treatment residue off-site shall comply with the notice and certification requirements applicable to generators under Section R315-268-7.

(6) Where the wastes are recyclable materials used in a manner constituting disposal subject to the provisions of Subsection R315-266-20(b) regarding treatment standards and prohibition levels, the owner or operator of a treatment facility, i.e., the recycler, shall, for the initial shipment of waste, prepare a one-time certification described in Subsection R315-268-7(b)(4), and a one-time notice which includes the information in Subsection R315-268-7(b)(3), except the manifest number. The certification and notification shall be placed in the facility's on-site files. If the waste or the receiving facility changes, a new

certification and notification shall be prepared and placed in the on-site files. In addition, the recycling facility shall also keep records of the name and location of each entity receiving the hazardous waste-derived product.

(c) Except where the owner or operator is disposing of any waste that is a recyclable material used in a manner constituting disposal pursuant to Subsection R315-266-20(b), the owner or operator of any land disposal facility disposing any waste subject to restrictions under Rule R315-268 shall:

(1) Have copies of the notice and certifications specified in Subsection R315-268-7(a) or (b).

(2) Test the waste, or an extract of the waste or treatment residue developed using test method 1311, the Toxicity Characteristic Leaching Procedure, described in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846 as incorporated by reference in Section R315-260-11, to assure that the wastes or treatment residues are in compliance with the applicable treatment standards set forth in Sections R315-268-40 through 49. Such testing shall be performed according to the frequency specified in the facility's waste analysis plan as required by Section R315-264-13 or 40 CFR 265.13, which is adopted by reference.

(d) Generators or treaters who first claim that hazardous debris is excluded from the definition of hazardous waste under Subsection R315-261-3(f), i.e., debris treated by an extraction or destruction technology provided by Table 1, Section R315-268-45, and debris that the Director has determined does not contain hazardous waste, are subject to the following notification and certification requirements:

(1) A one-time notification, including the following information, shall be submitted to the Director:

(i) The name and address of the Subtitle D facility receiving the treated debris;

(ii) A description of the hazardous debris as initially generated, including the applicable EPA Hazardous Waste Number(s); and

(iii) For debris excluded under Subsection R315-261-3(f)(1), the technology from Table 1, Section R315-268-45, used to treat the debris.

(2) The notification shall be updated if the debris is shipped to a different facility, and, for debris excluded under Subsection R315-261-2(f)(1), if a different type of debris is treated or if a different technology is used to treat the debris.

(3) For debris excluded under Subsection R315-261-3(f)(1), the owner or operator of the treatment facility shall document and certify compliance with the treatment standards of Table 1, Section R315-268-45, as follows:

(i) Records shall be kept of all inspections, evaluations, and analyses of treated debris that are made to determine compliance with the treatment standards;

(ii) Records shall be kept of any data or information the treater obtains during treatment of the debris that identifies key operating parameters of the treatment unit; and

(iii) For each shipment of treated debris, a certification of compliance with the treatment standards shall be signed by an authorized representative and placed in the facility's files. The certification shall state the following: "I certify under penalty of law that the debris has been treated in accordance with the requirements of Section R315-268-45. I am aware that there are significant penalties for making a false certification, including the possibility of fine and imprisonment."

(e) Generators and treaters who first receive from the Director a determination that a given contaminated soil subject to LDRs as provided in Subsection R315-268-49(a) no longer contains a listed hazardous waste and generators and treaters who first determine that a contaminated soil subject to LDRs as provided in Subsection R315-268-49(a) no longer exhibits a characteristic of hazardous waste shall:

(1) Prepare a one-time only documentation of these

determinations including all supporting information; and,

(2) Maintain that information in the facility files and other records for a minimum of three years.

R315-268-9. Land Disposal Restrictions -- Special Rules Regarding Wastes That Exhibit a Characteristic.

(a) The initial generator of a solid waste shall determine each EPA Hazardous Waste Number, waste code, applicable to the waste in order to determine the applicable treatment standards under Sections R315-268-40 through 49. This determination may be made concurrently with the hazardous waste determination required in Section R315-262-11. For purposes of Rule R315-268, the waste shall carry the waste code for any applicable listed waste Sections R315-261-30 through 35. In addition, where the waste exhibits a characteristic, the waste shall carry one or more of the characteristic waste codes Sections R315-261-20 through 24, except when the treatment standard for the listed waste operates in lieu of the treatment standard for the characteristic waste, as specified in Subsection R315-268-9(b). If the generator determines that their waste displays a hazardous characteristic, and is not D001 nonwastewaters treated by CMBST, RORGS, OR POLYM of Section R315-268-42, Table 1, the generator shall determine the underlying hazardous constituents, as defined at Subsection R315-268-2(i), in the characteristic waste.

(b) Where a prohibited waste is both listed under Sections R315-261-30 through 35 and exhibits a characteristic under Sections R315-261-20 through 24, the treatment standard for the waste code listed in Sections R315-261-30 through 35 shall operate in lieu of the standard for the waste code under Sections R315-261-20 through 24, provided that the treatment standard for the listed waste includes a treatment standard for the constituent that causes the waste to exhibit the characteristic. Otherwise, the waste shall meet the treatment standards for all applicable listed and characteristic waste codes.

(c) In addition to any applicable standards determined from the initial point of generation, no prohibited waste which exhibits a characteristic under Sections R315-261-20 through 24 may be land disposed unless the waste complies with the treatment standards under Sections R315-268-40 through 49.

(d) Wastes that exhibit a characteristic are also subject to Section R315-268-7 requirements, except that once the waste is no longer hazardous, a one-time notification and certification shall be placed in the generator's or treater's on-site files. The notification and certification shall be updated if the process or operation generating the waste changes and/or if the non-hazardous waste facility receiving the waste changes.

(1) The notification shall include the following information:

(i) Name and address of the non-hazardous waste facility receiving the waste shipment; and

(ii) A description of the waste as initially generated, including the applicable EPA hazardous waste code(s), treatability group(s), and underlying hazardous constituents, as defined in Subsection R315-268-2(i), unless the waste will be treated and monitored for all underlying hazardous constituents. If all underlying hazardous constituents will be treated and monitored, there is no requirement to list any of the underlying hazardous constituents on the notice.

(2) The certification shall be signed by an authorized representative and shall state the language found in Subsection R315-268-7(b)(4).

(i) If treatment removes the characteristic but does not meet standards applicable to underlying hazardous constituents, then the certification found in Subsection R315-268-7(b)(4)(iv) applies.

R315-268-13. Land Disposal Restrictions -- Schedule for Wastes Identified or Listed After November 8, 1984.

In the case of any hazardous waste identified or listed under section 3001 after November 8, 1984, the Administrator shall make a land disposal prohibition determination within 6 months after the date of identification or listing.

R315-268-14. Land Disposal Restrictions -- Surface Impoundment Exemptions.

(a) Section R315-268-14 defines additional circumstances under which an otherwise prohibited waste may continue to be placed in a surface impoundment.

(b) Wastes which are newly identified or listed under RCRA section 3001 after November 8, 1984, and stored in a surface impoundment that is newly subject to subtitle C of RCRA as a result of the additional identification or listing, may continue to be stored in the surface impoundment for 48 months after the promulgation of the additional listing or characteristic, notwithstanding that the waste is otherwise prohibited from land disposal, provided that the surface impoundment is in compliance with the requirements of 40 CFR 265.90 through 94, which are adopted by reference, within 12 months after promulgation of the new listing or characteristic.

(c) Wastes which are newly identified or listed under RCRA section 3001 after November 8, 1984, and treated in a surface impoundment that is newly subject to subtitle C of RCRA as a result of the additional identification or listing, may continue to be treated in that surface impoundment, notwithstanding that the waste is otherwise prohibited from land disposal, provided that surface impoundment is in compliance with the requirements of 40 CFR 265.90 through 94, which are adopted by reference, within 12 months after the promulgation of the new listing or characteristic. In addition, if the surface impoundment continues to treat hazardous waste after 48 months from promulgation of the additional listing or characteristic, it shall then be in compliance with Section R315-268-4.

R315-268-20. Land Disposal Restrictions -- Waste Specific Prohibitions -- Dyes and/or Pigments Production Wastes.

(a) Effective August 23, 2005, the waste specified in Rule R315-261 as EPA Hazardous Waste Number K181, and soil and debris contaminated with this waste, radioactive wastes mixed with this waste, and soil and debris contaminated with radioactive wastes mixed with this waste are prohibited from land disposal.

(b) The requirements of Subsection R315-268-20(a) do not apply if:

(1) The wastes meet the applicable treatment standards specified in Sections R315-268-40 through 49;

(2) Persons have been granted an exemption from a prohibition pursuant to a petition under Section R315-268-6, with respect to those wastes and units covered by the petition;

(3) The wastes meet the applicable treatment standards established pursuant to a petition granted under Section R315-268-44;

(4) Hazardous debris has met the treatment standards in Section R315-268-40 or the alternative treatment standards in Section R315-268-45; or

(5) Persons have been granted an extension to the effective date of a prohibition pursuant to Section R315-268-5, with respect to these wastes covered by the extension.

(c) To determine whether a hazardous waste identified in Section R315-268-20 exceeds the applicable treatment standards specified in Section R315-268-40, the initial generator shall test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract of the waste, or the generator may use knowledge of the waste. If the waste contains regulated constituents in excess of the applicable Sections R315-268-40 through 49 levels, the waste is prohibited

from land disposal, and all requirements of Rule R315-268 are applicable, except as otherwise specified.

R315-268-30. Land Disposal Restrictions -- Waste Specific Prohibitions -- Wood Preserving Wastes.

(a) Effective August 11, 1997, the following wastes are prohibited from land disposal: the wastes specified in Rule R315-261 as EPA Hazardous Waste numbers F032, F034, and F035.

(b) Effective May 12, 1999, the following wastes are prohibited from land disposal: soil and debris contaminated with F032, F034, F035; and radioactive wastes mixed with EPA Hazardous waste numbers F032, F034, and F035.

(c) Between May 12, 1997 and May 12, 1999, soil and debris contaminated with F032, F034, F035; and radioactive waste mixed with F032, F034, and F035 may be disposed in a landfill or surface impoundment only if such unit is in compliance with the requirements specified in Subsection R315-268-5(h)(2).

(d) The requirements of Subsections R315-268-30(a) and (b) do not apply if:

(1) The wastes meet the applicable treatment standards specified in Sections R315-268-40 through 49;

(2) Persons have been granted an exemption from a prohibition pursuant to a petition under Section R315-268-6, with respect to those wastes and units covered by the petition;

(3) The wastes meet the applicable alternate treatment standards established pursuant to a petition granted under Section R315-268-44; or

(4) Persons have been granted an extension to the effective date of a prohibition pursuant to Section R315-268-5, with respect to those wastes covered by the extension.

(e) To determine whether a hazardous waste identified in Section R315-268-30 exceeds the applicable treatment standards specified in Section R315-268-40, the initial generator shall test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains constituents in excess of the applicable Universal Treatment Standard levels of Section R315-268-48, the waste is prohibited from land disposal, and all requirements of Rule R315-268 are applicable, except as otherwise specified.

R315-268-31. Land Disposal Restrictions -- Waste Specific Prohibitions-Dioxin-Containing Wastes.

(a) Effective November 8, 1988, the dioxin-containing wastes specified in Section R315-261-31 as EPA Hazardous Waste Nos. F020, F021, F022, F023, F026, F027, and F028, are prohibited from land disposal unless the following condition applies:

(1) The F020-F023 and F026-F028 dioxin-containing waste is contaminated soil and debris resulting from a response action taken under section 104 or 106 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) or a corrective action taken under subtitle C of the Resource Conservation and Recovery Act (RCRA).

(b) Effective November 8, 1990, the F020-F023 and F026-F028 dioxin-containing wastes listed in Subsection R315-268-31(a)(1) are prohibited from land disposal.

(c) Between November 8, 1988, and November 8, 1990, wastes included in Subsection R315-268-31(a)(1) may be disposed in a landfill or surface impoundment only if such unit is in compliance with the requirements specified in Subsection R315-268-5(h)(2) and all other applicable requirements of Rules R315-264 and 265.

(d) The requirements of Subsections R315-268-31(a) and (b) do not apply if:

(1) The wastes meet the standards of Sections R315-268-

40 through 49; or

(2) Persons have been granted an exemption from a prohibition pursuant to a petition under Section R315-268-6, with respect to those wastes and units covered by the petition; or

(3) Persons have been granted an extension to the effective date of a prohibition pursuant to Section R315-268-5, with respect to those wastes covered by the extension.

R315-268-32. Land Disposal Restrictions -- Waste Specific Prohibitions -- Soils Exhibiting the Toxicity Characteristic for Metals and Containing Pcb's.

(a) Effective December 26, 2000, the following wastes are prohibited from land disposal: any volumes of soil exhibiting the toxicity characteristic solely because of the presence of metals (D004---D011) and containing PCBs.

(b) The requirements of Subsection R315-268-32(a) do not apply if:

(1)(i) The wastes contain halogenated organic compounds in total concentration less than 1,000 mg/kg; and

(ii) The wastes meet the treatment standards specified in Sections R315-268-40 through 49 for EPA hazardous waste numbers D004-D011, as applicable; or

(2)(i) The wastes contain halogenated organic compounds in total concentration less than 1,000 mg/kg; and

(ii) The wastes meet the alternative treatment standards specified in Section R315-268-49 for contaminated soil; or

(3) Persons have been granted an exemption from a prohibition pursuant to a petition under Section R315-268-6, with respect to those wastes and units covered by the petition; or

(4) The wastes meet applicable alternative treatment standards established pursuant to a petition granted under Section R315-268-44.

R315-268-33. Land Disposal Restrictions Waste Specific Prohibitions -- Chlorinated Aliphatic Wastes.

(a) Effective May 8, 2001, the wastes specified in Rule R315-261 as EPA Hazardous Wastes Numbers K174, and K175, soil and debris contaminated with these wastes, radioactive wastes mixed with these wastes, and soil and debris contaminated with radioactive wastes mixed with these wastes are prohibited from land disposal.

(b) The requirements of Subsection R315-268-33(a) do not apply if:

(1) The wastes meet the applicable treatment standards specified in Sections R315-268-40 through 49;

(2) Persons have been granted an exemption from a prohibition pursuant to a petition under Section R315-268-6, with respect to those wastes and units covered by the petition;

(3) The wastes meet the applicable treatment standards established pursuant to a petition granted under Section R315-268-44;

(4) Hazardous debris has met the treatment standards in Section R315-268-40 or the alternative treatment standards in Section R315-268-45; or

(5) Persons have been granted an extension to the effective date of a prohibition pursuant to Section R315-268-5, with respect to these wastes covered by the extension.

(c) To determine whether a hazardous waste identified in Sections R315-268-33 exceeds the applicable treatment standards specified in Section R315-268-40, the initial generator shall test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains regulated constituents in excess of the applicable levels of Sections R315-268-40 through 49, the waste is prohibited from land disposal, and all requirements of Rule R315-268 are

applicable, except as otherwise specified.

(d) Disposal of K175 wastes that have complied with all applicable Section R315-268-40 treatment standards shall also be macroencapsulated in accordance with Section R315-268-45 Table 1 unless the waste is placed in:

(1) A hazardous waste monofill containing only K175 wastes that meet all applicable Section R315-268-40 treatment standards; or

(2) A dedicated hazardous waste landfill cell in which all other wastes being co-disposed are at pH less than or equal to 6.0.

R315-268-34. Land Disposal Restrictions -- Waste Specific Prohibitions-Toxicity Characteristic Metal Wastes.

(a) Effective August 24, 1998, the following wastes are prohibited from land disposal: the wastes specified in Rule R315-261 as EPA Hazardous Waste numbers D004-D011 that are newly identified, i.e. wastes, soil, or debris identified as hazardous by the Toxic Characteristic Leaching Procedure but not the Extraction Procedure, and waste, soil, or debris from mineral processing operations that is identified as hazardous by the specifications at Rule R315-261.

(b) Effective November 26, 1998, the following waste is prohibited from land disposal: Slag from secondary lead smelting which exhibits the Toxicity Characteristic due to the presence of one or more metals.

(c) Effective May 26, 2000, the following wastes are prohibited from land disposal: newly identified characteristic wastes from elemental phosphorus processing; radioactive wastes mixed with EPA Hazardous wastes D004-D011 that are newly identified, i.e., wastes, soil, or debris identified as hazardous by the Toxic Characteristic Leaching Procedure but not the Extraction Procedure; or mixed with newly identified characteristic mineral processing wastes, soil, or debris.

(d) Between May 26, 1998 and May 26, 2000, newly identified characteristic wastes from elemental phosphorus processing, radioactive waste mixed with D004-D011 wastes that are newly identified, i.e., wastes, soil, or debris identified as hazardous by the Toxic Characteristic Leaching Procedure but not the Extraction Procedure, or mixed with newly identified characteristic mineral processing wastes, soil, or debris may be disposed in a landfill or surface impoundment only if such unit is in compliance with the requirements specified in Subsection R315-268-5(h).

(e) The requirements of Subsection R315-268-34(a) and (b) do not apply if:

(1) The wastes meet the applicable treatment standards specified in Sections R315-268-40 through 49;

(2) Persons have been granted an exemption from a prohibition pursuant to a petition under Section R315-268-6, with respect to those wastes and units covered by the petition;

(3) The wastes meet the applicable alternate treatment standards established pursuant to a petition granted under Section R315-268-44; or

(4) Persons have been granted an extension to the effective date of a prohibition pursuant to Section R315-268-5, with respect to these wastes covered by the extension.

(f) To determine whether a hazardous waste identified in Section R315-268-34 exceeds the applicable treatment standards specified in Section R315-268-40, the initial generator shall test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentration in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains constituents, including underlying hazardous constituents in characteristic wastes, in excess of the applicable Universal Treatment Standard levels of Section R315-268-48, the waste is prohibited from land disposal, and all requirements of Rule R315-268 are applicable, except as otherwise specified.

R315-268-35. Land Disposal Restrictions -- Waste Specific Prohibitions -- Petroleum Refining Wastes.

(a) Effective February 8, 1999, the wastes specified in Rule R315-261 as EPA Hazardous Wastes Numbers K169, K170, K171, and K172, soils and debris contaminated with these wastes, radioactive wastes mixed with these hazardous wastes, and soils and debris contaminated with these radioactive mixed wastes, are prohibited from land disposal.

(b) The requirements of Subsection R315-268-35(a) do not apply if:

(1) The wastes meet the applicable treatment standards specified in Sections R315-268-40 through 49;

(2) Persons have been granted an exemption from a prohibition pursuant to a petition under Section R315-268-6, with respect to those wastes and units covered by the petition;

(3) The wastes meet the applicable treatment standards established pursuant to a petition granted under Section R315-268-44;

(4) Hazardous debris that have met treatment standards in Section R315-268-40 or in the alternative treatment standards in Section R315-268-45; or

(5) Persons have been granted an extension to the effective date of a prohibition pursuant to Section R315-268-5, with respect to these wastes covered by the extension.

(c) To determine whether a hazardous waste identified in Section R315-268-35 exceeds the applicable treatment standards specified in Section R315-268-40, the initial generator shall test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains constituents in excess of the applicable Universal Treatment Standard levels of Section R315-268-48, the waste is prohibited from land disposal, and all requirements of Rule R315-268 are applicable, except as otherwise specified.

R315-268-36. Land Disposal Restrictions -- Waste Specific Prohibitions-Inorganic Chemical Wastes.

(a) Effective May 20, 2002, the wastes specified in Rule R315-261 as EPA Hazardous Wastes Numbers K176, K177, and K178, and soil and debris contaminated with these wastes, radioactive wastes mixed with these wastes, and soil and debris contaminated with radioactive wastes mixed with these wastes are prohibited from land disposal.

(b) The requirements of Subsection R315-268-36(a) do not apply if:

(1) The wastes meet the applicable treatment standards specified in Sections R315-268-40 through 49;

(2) Persons have been granted an exemption from a prohibition pursuant to a petition under Section R315-268-6, with respect to those wastes and units covered by the petition;

(3) The wastes meet the applicable treatment standards established pursuant to a petition granted under Section R315-268-44;

(4) Hazardous debris has met the treatment standards in Section R315-268-40 or the alternative treatment standards in Section R315-268-45; or

(5) Persons have been granted an extension to the effective date of a prohibition pursuant to Section R315-268-5, with respect to these wastes covered by the extension.

(c) To determine whether a hazardous waste identified in Section R315-268-36 exceeds the applicable treatment standards specified in Section R315-268-40, the initial generator shall test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains regulated constituents in excess of the applicable Sections R315-268-40 through 49 levels, the waste is prohibited

from land disposal, and all requirements of Rule R315-268 are applicable, except as otherwise specified.

R315-268-37. Land Disposal Restrictions -- Waste Specific Prohibitions -- Ignitable and Corrosive Characteristic Wastes Whose Treatment Standards Were Vacated.

(a) Effective August 9, 1993, the wastes specified in Section R315-261-21 as D001, and is not in the High TOC Ignitable Liquids Subcategory, and specified in Section R315-261-22 as D002, that are managed in systems other than those whose discharge is regulated under the Clean Water Act (CWA), or that inject in Class I deep wells regulated under the Safe Drinking Water Act (SDWA), or that are zero dischargers that engage in CWA-equivalent treatment before ultimate land disposal, are prohibited from land disposal. CWA-equivalent treatment means biological treatment for organics, alkaline chlorination or ferrous sulfate precipitation for cyanide, precipitation/sedimentation for metals, reduction of hexavalent chromium, or other treatment technology that can be demonstrated to perform equally or greater than these technologies.

(b) Effective February 10, 1994, the wastes specified in Section R315-261-21 as D001, and is not in the High TOC Ignitable Liquids Subcategory, and specified in Section R315-261-22 as D002, that are managed in systems defined in 40 CFR 144.6(e) and 146.6(e) as Class V injection wells, that do not engage in CWA-equivalent treatment before injection, are prohibited from land disposal.

R315-268-38. Land Disposal Restrictions -- Waste Specific Prohibitions--Newly Identified Organic Toxicity Characteristic Wastes and Newly Listed Coke By-Product and Chlorotoluene Production Wastes.

(a) Effective December 19, 1994, the wastes specified in Section R315-261-32 as EPA Hazardous Waste numbers K141, K142, K143, K144, K145, K147, K148, K149, K150, and K151 are prohibited from land disposal. In addition, debris contaminated with EPA Hazardous Waste numbers F037, F038, K107-K112, K117, K118, K123-K126, K131, K132, K136, U328, U353, U359, and soil and debris contaminated with D012-D043, K141-K145, and K147-K151 are prohibited from land disposal. The following wastes that are specified in Section R315-261-24, Table 1 as EPA Hazardous Waste numbers: D012, D013, D014, D015, D016, D017, D018, D019, D020, D021, D022, D023, D024, D025, D026, D027, D028, D029, D030, D031, D032, D033, D034, D035, D036, D037, D038, D039, D040, D041, D042, D043 that are not radioactive, or that are managed in systems other than those whose discharge is regulated under the Clean Water Act (CWA), or that are zero dischargers that do not engage in CWA-equivalent treatment before ultimate land disposal, or that are injected in Class I deep wells regulated under the Safe Drinking Water Act (SDWA), are prohibited from land disposal. CWA-equivalent treatment means biological treatment for organics, alkaline chlorination or ferrous sulfate precipitation for cyanide, precipitation/sedimentation for metals, reduction of hexavalent chromium, or other treatment technology that can be demonstrated to perform equally or better than these technologies.

(b) On September 19, 1996, radioactive wastes that are mixed with D018-D043 that are managed in systems other than those whose discharge is regulated under the Clean Water Act (CWA), or that inject in Class I deep wells regulated under the Safe Drinking Water Act (SDWA), or that are zero dischargers that engage in CWA-equivalent treatment before ultimate land disposal, are prohibited from land disposal. CWA-equivalent treatment means biological treatment for organics, alkaline chlorination or ferrous sulfate precipitation for cyanide, precipitation/sedimentation for metals, reduction of hexavalent chromium, or other treatment technology that can be

demonstrated to perform equally or greater than these technologies. Radioactive wastes mixed with K141-K145, and K147-K151 are also prohibited from land disposal. In addition, soil and debris contaminated with these radioactive mixed wastes are prohibited from land disposal.

(c) Between December 19, 1994 and September 19, 1996, the wastes included in Subsection R315-268-38(b) may be disposed in a landfill or surface impoundment, only if such unit is in compliance with the requirements specified in Subsection R315-268-5(h)(2).

(d) The requirements of Subsections R315-268-38(a), (b), and (c) do not apply if:

(1) The wastes meet the applicable treatment standards specified in Sections R315-268-40 through 49;

(2) Persons have been granted an exemption from a prohibition pursuant to a petition under Section R315-268-6, with respect to those wastes and units covered by the petition;

(3) The wastes meet the applicable alternate treatment standards established pursuant to a petition granted under Section R315-268-44;

(4) Persons have been granted an extension to the effective date of a prohibition pursuant to Section R315-268-5, with respect to these wastes covered by the extension.

(e) To determine whether a hazardous waste identified in Section R315-268-38 exceeds the applicable treatment standards specified in Section R315-268-40, the initial generator shall test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains constituents in excess of the applicable Sections R315-268-40 through 49, the waste is prohibited from land disposal, and all requirements of Rule R315-268 are applicable, except as otherwise specified.

R315-268-39. Land Disposal Restrictions -- Waste Specific Prohibitions -- Spent Aluminum Potliners; Reactive; and Carbamate Wastes.

(a) On July 8, 1996, the wastes specified in Section R315-261-32 as EPA Hazardous Waste numbers K156-K159, and K161; and in Section R315-261-33 as EPA Hazardous Waste numbers P127, P128, P185, P188-P192, P194, P196-P199, P201-P205, U271, U278-U280, U364, U367, U372, U373, U387, U389, U394, U395, U404, and U409-U411 are prohibited from land disposal. In addition, soil and debris contaminated with these wastes are prohibited from land disposal.

(b) On July 8, 1996, the wastes identified in Section R315-261-23 as D003 that are managed in systems other than those whose discharge is regulated under the Clean Water Act (CWA), or that inject in Class I deep wells regulated under the Safe Drinking Water Act (SDWA), or that are zero dischargers that engage in CWA-equivalent treatment before ultimate land disposal, are prohibited from land disposal. This prohibition does not apply to unexploded ordnance and other explosive devices which have been the subject of an emergency response. Such D003 wastes are prohibited unless they meet the treatment standard of DEACT before land disposal, see Section R315-268-40.

(c) On September 21, 1998, the wastes specified in Section R315-261-32 as EPA Hazardous Waste number K088 are prohibited from land disposal. In addition, soil and debris contaminated with these wastes are prohibited from land disposal.

(d) On April 8, 1998, radioactive wastes mixed with K088, K156-K159, K161, P127, P128, P185, P188-P192, P194, P196-P199, P201-P205, U271, U278-U280, U364, U367, U372, U373, U387, U389, U394, U395, U404, and U409-U411 are prohibited from land disposal. In addition, soil and debris

contaminated with these radioactive mixed wastes are prohibited from land disposal.

(e) Between July 8, 1996, and April 8, 1998, the wastes included in Subsections R315-268-39(a), (c), and (d) may be disposed in a landfill or surface impoundment, only if such unit is in compliance with the requirements specified in Subsection R315-268-5(h)(2).

(f) The requirements of Subsections R315-268-39(a), (b), (c), and (d) do not apply if:

(1) The wastes meet the applicable treatment standards specified in Sections R315-268-40 through 49;

(2) Persons have been granted an exemption from a prohibition pursuant to a petition under Section R315-268-6, with respect to those wastes and units covered by the petition;

(3) The wastes meet the applicable alternate treatment standards established pursuant to a petition granted under Section R315-268-44;

(4) Persons have been granted an extension to the effective date of a prohibition pursuant to Section R315-268-5, with respect to these wastes covered by the extension.

(g) To determine whether a hazardous waste identified in Section R315-268-39 exceeds the applicable treatment standards specified in Section R315-268-40, the initial generator shall test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains constituents in excess of the applicable Sections R315-268-40 through 49, the waste is prohibited from land disposal, and all requirements of Rule R315-268 are applicable, except as otherwise specified.

R315-268-40. Land Disposal Restrictions -- Applicability of Treatment Standards.

(a) A prohibited waste identified in the table "Treatment Standards for Hazardous Wastes" may be land disposed only if it meets the requirements found in the table. For each waste, the table identifies one of three types of treatment standard requirements:

(1) All hazardous constituents in the waste or in the treatment residue shall be at or below the values found in the table for that waste ("total waste standards"); or

(2) The hazardous constituents in the extract of the waste or in the extract of the treatment residue shall be at or below the values found in the table ("waste extract standards"); or

(3) The waste shall be treated using the technology specified in the table ("technology standard"), which are described in detail in Section R315-268-42, Table 1-Technology Codes and Description of Technology-Based Standards.

(b) For wastewaters, compliance with concentration level standards is based on maximums for any one day, except for D004 through D011 wastes for which the previously promulgated treatment standards based on grab samples remain in effect. For all nonwastewaters, compliance with concentration level standards is based on grab sampling. For wastes covered by the waste extract standards, the test Method 1311, the Toxicity Characteristic Leaching Procedure found in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference in Section R315-260-11, shall be used to measure compliance. An exception is made for D004 and D008, for which either of two test methods may be used: Method 1311, or Method 1310B, the Extraction Procedure Toxicity Test. For wastes covered by a technology standard, the wastes may be land disposed after being treated using that specified technology or an equivalent treatment technology approved by the Administrator under the procedures set forth in Section R315-268-42(b).

(c) When wastes with differing treatment standards for a constituent of concern are combined for purposes of treatment,

the treatment residue shall meet the lowest treatment standard for the constituent of concern.

(d) Notwithstanding the prohibitions specified in Subsection R315-268-40(a), treatment and disposal facilities may demonstrate, and certify pursuant to Subsection R315-268-7(b)(5), compliance with the treatment standards for organic constituents specified by a footnote in the table "Treatment Standards for Hazardous Wastes" in Section R315-268-40, provided the following conditions are satisfied:

(1) The treatment standards for the organic constituents were established based on incineration in units operated in accordance with the technical requirements of Section R315-264-340 through 351, or based on combustion in fuel substitution units operating in accordance with applicable technical requirements;

(2) The treatment or disposal facility has used the methods referenced in Subsection R315-268-40(d)(1) to treat the organic constituents; and

(3) The treatment or disposal facility may demonstrate compliance with organic constituents if good-faith analytical efforts achieve detection limits for the regulated organic constituents that do not exceed the treatment standards specified in Section R315-268-40 by an order of magnitude.

(e) For characteristic wastes (D001-D043) that are subject to treatment standards in the following table "Treatment Standards for Hazardous Wastes," and are not managed in a wastewater treatment system that is regulated under the Clean Water Act (CWA), that is CWA-equivalent, or that is injected into a Class I nonhazardous deep injection well, all underlying hazardous constituents, as defined in Section R315-268-2(i), shall meet Universal Treatment Standards, found in Section R315-268-48, Table Universal Treatment Standards, prior to land disposal as defined in Subsection R315-268-2(c).

(f) The treatment standards for F001-F005 nonwastewater constituents carbon disulfide, cyclohexanone, and/or methanol apply to wastes which contain only one, two, or three of these constituents. Compliance is measured for these constituents in the waste extract from test Method 1311, the Toxicity Characteristic Leaching Procedure found in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference in Section R315-260-11. If the waste contains any of these three constituents along with any of the other 25 constituents found in F001-F005, then compliance with treatment standards for carbon disulfide, cyclohexanone, and/or methanol are not required.

(g) Between August 26, 1996 and March 4, 1999 the treatment standards for the wastes specified in Section R315-261-32 as EPA Hazardous Waste numbers K156-K161; and in Section R315-261-33 as EPA Hazardous Waste numbers P127, P128, P185, P188-P192, P194, P196-P199, P201-P205, U271, U277-U280, U364-U367, U372, U373, U375-U379, U381-U387, U389-U396, U400-U404, U407, and U409-U411; and soil contaminated with these wastes; may be satisfied by either meeting the constituent concentrations presented in the table "Treatment Standards for Hazardous Wastes" in Section R315-268-40, or by treating the waste by the following technologies: combustion, as defined by the technology code CMBST at Section R315-268-42 Table 1, for nonwastewaters; and, biodegradation as defined by the technology code BIODG, carbon adsorption as defined by the technology code CARBN, chemical oxidation as defined by the technology code CHOXD, or combustion as defined as technology code CMBST at Section R315-268-42 Table 1, for wastewaters.

(h) Prohibited D004-D011 mixed radioactive wastes and mixed radioactive listed wastes containing metal constituents, that were previously treated by stabilization to the treatment standards in effect at that time and then put into storage, do not have to be re-treated to meet treatment standards in Section

R315-268-40 prior to land disposal.

(i) Reserved

(j) Effective September 4, 1998, the treatment standards for the wastes specified in Section R315-261-33 as EPA Hazardous Waste numbers P185, P191, P192, P197, U364, U394, and U395 may be satisfied by either meeting the constituent concentrations presented in the table "Treatment Standards for Hazardous Wastes" in Section R315-268-40, or by treating the waste by the following technologies: combustion, as defined by the technology code CMBST at Section R315-268-42 Table 1, for nonwastewaters; and, biodegradation as defined by the technology code BIODG, carbon adsorption as defined by the technology code CARBN, chemical oxidation as defined by the technology code CHOXD, or combustion as defined as technology code CMBST at Section R315-268-42 Table 1, for wastewaters.

Table Treatment Standards for Hazardous Wastes and the Footnotes To Treatment Standards Standard Table in 40 CFR 268.40, 2015 edition, are adopted and incorporated by reference.

R315-268-41. Land Disposal Restrictions -- Treatment Standards Expressed as Concentrations in Waste Extract.

For the requirements previously found in Section R315-268-41 and for treatment standards in Table CCWE-Constituent Concentrations in Waste Extracts, refer to Section R315-268-40.

R315-268-42. Land Disposal Restrictions -- Treatment Standards Expressed as Specified Technologies.

Note: For the requirements previously found in Section R315-268-42 in Table 2-Technology-Based Standards By RCRA Waste Code, and Table 3-Technology-Based Standards for Specific Radioactive Hazardous Mixed Waste, refer to Section R315-268-40.

(a) The following wastes in the table in R315-268-40 "Treatment Standards for Hazardous Wastes," for which standards are expressed as a treatment method rather than a concentration level, shall be treated using the technology or technologies specified in the table entitled "Technology Codes and Description of Technology-Based Standards" in Section R315-268-42.

Table 1

Technology code	Description of technology-based standards
ADGAS:	Venting of compressed gases into an absorbing or reacting media (i.e., solid or liquid)---venting can be accomplished through physical release utilizing valves/piping; physical penetration of the container; and/or penetration through detonation.
AMLGM:	Amalgamation of liquid, elemental mercury contaminated with radioactive materials utilizing inorganic reagents such as copper, zinc, nickel, gold, and sulfur that result in a nonliquid, semi-solid amalgam and thereby reducing potential emissions of elemental mercury vapors to the air.
BIODG:	Biodegradation of organics or non-metallic inorganics (i.e., degradable inorganics that contain the elements of phosphorus, nitrogen, and sulfur) in units operated under either aerobic or anaerobic conditions such that a surrogate compound or indicator parameter has been substantially reduced in concentration in the residuals, e.g., Total Organic Carbon can often be used as an indicator parameter for the biodegradation of many organic constituents that cannot be directly analyzed in wastewater residues.
CARBN:	Carbon adsorption, granulated or powdered, of non-metallic inorganics, organo-metallics, and/or organic constituents, operated such that

CHOXD:	Chemical or electrolytic oxidation utilizing the following oxidation reagents, or waste reagents, or combinations of reagents: (1) Hypochlorite, e.g., bleach; (2) chlorine; (3) chlorine dioxide; (4) ozone or UV, ultraviolet light, assisted ozone; (5) peroxides; (6) persulfates; (7) perchlorates; (8) permanganates; and/or (9) other oxidizing reagents of equivalent efficiency, performed in units operated such that a surrogate compound or indicator parameter has been substantially reduced in concentration in the residuals, e.g., Total Organic Carbon can often be used as an indicator parameter for the oxidation of many organic constituents that cannot be directly analyzed in wastewater residues. Chemical oxidation specifically includes what is commonly referred to as alkaline chlorination.
CHRED:	Chemical reduction utilizing the following reducing reagents, or waste reagents, or combinations of reagents: (1) Sulfur dioxide; (2) sodium, potassium, or alkali salts or sulfites, bisulfites, metabisulfites, and polyethylene glycols, e.g., NaPEG and KPEG; (3) sodium hydrosulfide; (4) ferrous salts; and/or (5) other reducing reagents of equivalent efficiency, performed in units operated such that a surrogate compound or indicator parameter has been substantially reduced in concentration in the residuals, e.g., Total Organic Halogens can often be used as an indicator parameter for the reduction of many halogenated organic constituents that cannot be directly analyzed in wastewater residues. Chemical reduction is commonly used for the reduction of hexavalent chromium to the trivalent state.
CMBST:	High temperature organic destruction technologies, such as combustion in incinerators, boilers, or industrial furnaces operated in accordance with the applicable requirements of Sections R315-264-340 through 351, 40 CFR 265.340 through 352, which are adopted by reference, or Sections R315-266-100 through 112, and in other units operated in accordance with applicable technical operating requirements; and certain non-combustive technologies, such as the Catalytic Extraction Process.
DEACT:	Deactivation to remove the hazardous characteristics of a waste due to its ignitability, corrosivity, and/or reactivity.
FSUBS:	Fuel substitution in units operated in accordance with applicable technical operating requirements.
HLVIT:	Vitrification of high level mixed radioactive wastes in units in compliance with all applicable radioactive protection requirements under control of the Nuclear Regulatory Commission.
IMERC:	Incineration of wastes containing organics and mercury in units operated in accordance with the technical operating requirements of Sections R315-264-340 through 351 and 40 CFR 265.340 through 352, which are adopted by reference. All wastewater and nonwastewater residues derived from this process shall then comply with the corresponding treatment standards per waste code with consideration of any applicable subcategories, e.g., High or Low Mercury Subcategories.
INCIN:	Incineration in units operated in accordance with the technical operating requirements of Sections R315-264-340 through 351 and 40 CFR 265.340 through 352, which are adopted by reference.
LLEXT:	Liquid-liquid extraction, often referred to as solvent extraction, of organics from liquid wastes into an immiscible solvent for which the hazardous constituents have a greater solvent

a surrogate compound or indicator parameter has not undergone breakthrough, e.g., Total Organic Carbon can often be used as an indicator parameter for the adsorption of many organic constituents that cannot be directly analyzed in wastewater residues. Breakthrough occurs when the carbon has become saturated with the constituent, or indicator parameter, and substantial change in adsorption rate associated with that constituent occurs.

	affinity, resulting in an extract high in organics that shall undergo either incineration, reuse as a fuel, or other recovery/reuse and a raffinate, extracted liquid waste, proportionately low in organics that shall undergo further treatment as specified in the standard.		concentration techniques such as decantation, filtration, including ultrafiltration, and centrifugation, when used in conjunction with the above listed recovery technologies.
MACRO:	Macroencapsulation with surface coating materials such as polymeric organics, e.g., resins and plastics, or with a jacket of inert inorganic materials to substantially reduce surface exposure to potential leaching media. Macroencapsulation specifically does not include any material that would be classified as a tank or container according to Section R315-260-10.	RORGS:	Recovery of organics utilizing one or more of the following technologies: (1) Distillation; (2) thin film evaporation; (3) steam stripping; (4) carbon adsorption; (5) critical fluid extraction; (6) liquid-liquid extraction; (7) precipitation/crystallization, including freeze crystallization; or (8) chemical phase separation techniques, i.e., addition of acids, bases, demulsifiers, or similar chemicals;-Note: his does not preclude the use of other physical phase separation techniques such as a decantation, filtration, including ultrafiltration, and centrifugation, when used in conjunction with the above listed recovery technologies.
NEUTR:	Neutralization with the following reagents, or waste reagents, or combinations of reagents: (1) Acids; (2) bases; or (3) water, including wastewaters, resulting in a pH greater than 2 but less than 12.5 as measured in the aqueous residuals.	RTHRM:	Thermal recovery of metals or inorganics from nonwastewaters in units identified as industrial furnaces according to Subsections R315-260-10(1), (6), (7), (11), and (12) under the definition of "industrial furnaces".
NLDBR:	No land disposal based on recycling.	RZINC:	Resmelting in high temperature metal recovery units for the purpose of recovery of zinc.
POLYM:	Formation of complex high-molecular weight solids through polymerization of monomers in high-TOC D001 non-wastewaters which are chemical components in the manufacture of plastics.	STABL:	Stabilization with the following reagents, or waste reagents, or combinations of reagents: (1) Portland cement; or (2) lime/pozzolans, e.g., fly ash and cement kiln dust, -this does not preclude the addition of reagents, e.g., iron salts, silicates, and clays, designed to enhance the set/cure time and/or compressive strength, or to overall reduce the leachability of the metal or inorganic.
PRECP:	Chemical precipitation of metals and other inorganics as insoluble precipitates of oxides, hydroxides, carbonates, sulfides, sulfates, chlorides, fluorides, or phosphates. The following reagents, or waste reagents, are typically used alone or in combination: (1) Lime, i.e., containing oxides and/or hydroxides of calcium and/or magnesium; (2) caustic, i.e., sodium and/or potassium hydroxides; (3) soda ash, i.e., sodium carbonate; (4) sodium sulfide; (5) ferric sulfate or ferric chloride; (6) alum; or (7) sodium sulfate. Additional flocculating, coagulation or similar reagents/processes that enhance sludge dewatering characteristics are not precluded from use.	SSTRP:	Steam stripping of organics from liquid wastes utilizing direct application of steam to the wastes operated such that liquid and vapor flow rates, as well as temperature and pressure ranges, have been optimized, monitored, and maintained. These operating parameters are dependent upon the design parameters of the unit, such as the number of separation stages and the internal column design, thus, resulting in a condensed extract high in organics that shall undergo either incineration, reuse as a fuel, or other recovery/reuse and an extracted wastewater that shall undergo further treatment as specified in the standard.
RBERY:	Thermal recovery of Beryllium.	VTD:	Vacuum thermal desorption of low-level radioactive hazardous mixed waste in units in compliance with all applicable radioactive protection requirements under control of the Nuclear Regulatory Commission.
RCGAS:	Recovery/reuse of compressed gases including techniques such as reprocessing of the gases for reuse/resale; filtering/adsorption of impurities; remixing for direct reuse or resale; and use of the gas as a fuel source.	WETOX:	Wet air oxidation performed in units operated such that a surrogate compound or indicator parameter has been substantially reduced in concentration in the residuals, e.g., Total Organic Carbon can often be used as an indicator parameter for the oxidation of many organic constituents that cannot be directly analyzed in wastewater residues.
RCORR:	Recovery of acids or bases utilizing one or more of the following recovery technologies: (1) Distillation, i.e., thermal concentration; (2) ion exchange; (3) resin or solid adsorption; (4) reverse osmosis; and/or (5) incineration for the recovery of acid-Note: this does not preclude the use of other physical phase separation or concentration techniques such as decantation, filtration, including ultrafiltration, and centrifugation, when used in conjunction with the above listed recovery technologies.	WTRRX:	Controlled reaction with water for highly reactive inorganic or organic chemicals with precautionary controls for protection of workers from potential violent reactions as well as precautionary controls for potential emissions of toxic/ignitable levels of gases released during the reaction.
RLEAD:	Thermal recovery of lead in secondary lead smelters.		
RMERC:	Retorting or roasting in a thermal processing unit capable of volatilizing mercury and subsequently condensing the volatilized mercury for recovery. The retorting or roasting unit, or facility, shall be subject to one or more of the following: (a) a National Emissions Standard for Hazardous Air Pollutants (NESHAP) for mercury; (b) a Best Available Control Technology (BACT) or a Lowest Achievable Emission Rate (LAER) standard for mercury imposed pursuant to a Prevention of Significant Deterioration (PSD) permit; or (c) a state permit that establishes emission limitations, within meaning of section 302 of the Clean Air Act, for mercury. All wastewater and nonwastewater residues derived from this process shall then comply with the corresponding treatment standards per waste code with consideration of any applicable subcategories, e.g., High or Low Mercury Subcategories.		
RMETL:	Recovery of metals or inorganics utilizing one or more of the following direct physical/removal technologies: (1) Ion exchange; (2) resin or solid, i.e., zeolites, adsorption; (3) reverse osmosis; (4) chelation/solvent extraction; (5) freeze crystallization; (6) ultrafiltration and/or (7) simple precipitation, i.e., crystallization,- Note: This does not preclude the use of other physical phase separation or		

Note 1: When a combination of these technologies, i.e., a treatment train, is specified as a single treatment standard, the order of application is specified in Section R315-268-42, Table 2 by indicating the five letter technology code that shall be applied first, then the designation "fb," an abbreviation for "followed by," then the five letter technology code for the technology that shall be applied next, and so on.

Note 2: When more than one technology, or treatment train, are specified as alternative treatment standards, the five letter technology codes, or the treatment trains, are separated by a semicolon (;) with the last technology preceded by the word "OR".

This indicates that any one of these BDAT technologies or treatment trains can be used for compliance with the standard.

(b) Any person may submit an application to the Administrator demonstrating that an alternative treatment

method can achieve a measure of performance equivalent to that achieved by methods specified in Subsection R315-268-42(a), (c), and (d) for wastes or specified in Table 1 of Section R315-268-45 for hazardous debris. The applicant shall submit information demonstrating that his treatment method is in compliance with federal, state, and local requirements and is protective of human health and the environment. On the basis of such information and any other available information, the Administrator may approve the use of the alternative treatment method if he finds that the alternative treatment method provides a measure of performance equivalent to that achieved by methods specified in Subsections R315-268-42(a), (c), and (d) for wastes or in Table 1 of Section R315-268-45 for hazardous debris. Any approval shall be stated in writing and may contain such provisions and conditions as the Administrator deems appropriate. The person to whom such approval is issued shall comply with all limitations contained in such a determination.

(c) As an alternative to the otherwise applicable Sections R315-268-40 through 49 treatment standards, lab packs are eligible for land disposal provided the following requirements are met:

(1) The lab packs comply with the applicable provisions of Section R315-264-316 and 40 CFR 265.316, which is adopted by reference;

(2) The lab pack does not contain any of the wastes listed in Appendix IV to Rule R315-268;

(3) The lab packs are incinerated in accordance with the requirements of Sections R315-264-340 through 351, or 40 CFR 265.340 through 352, which are adopted by reference; and

(4) Any incinerator residues from lab packs containing D004, D005, D006, D007, D008, D010, and D011 are treated in compliance with the applicable treatment standards specified for such wastes in Sections R315-268-40 through 49.

(d) Radioactive hazardous mixed wastes are subject to the treatment standards in Section R315-268-40. Where treatment standards are specified for radioactive mixed wastes in the Table of Treatment Standards, those treatment standards shall govern. Where there is no specific treatment standard for radioactive mixed waste, the treatment standard for the hazardous waste, as designated by EPA waste code, applies. Hazardous debris containing radioactive waste is subject to the treatment standards specified in Section R315-268-45.

R315-268-43. Land Disposal Restrictions -- Treatment Standards Expressed as Waste Concentrations.

For the requirements previously found in Section R315-268-43 and for treatment standards in Table CCW-Constituent Concentrations in Wastes, refer to Section R315-268-40.

R315-268-44. Land Disposal Restrictions -- Variance From a Treatment Standard.

(a) Based on a petition filed by a generator or treater of hazardous waste, the Administrator may approve a variance from an applicable treatment standard if:

(1) It is not physically possible to treat the waste to the level specified in the treatment standard, or by the method specified as the treatment standard. To show that this is the case, the petitioner shall demonstrate that because the physical or chemical properties of the waste differ significantly from waste analyzed in developing the treatment standard, the waste cannot be treated to the specified level or by the specified method; or

(2) It is inappropriate to require the waste to be treated to the level specified in the treatment standard or by the method specified as the treatment standard, even though such treatment is technically possible. To show that this is the case, the petitioner shall either demonstrate that:

(i) Treatment to the specified level or by the specified method is technically inappropriate, for example, resulting in

combustion of large amounts of mildly contaminated environmental media; or

(ii) For remediation waste only, treatment to the specified level or by the specified method is environmentally inappropriate because it would likely discourage aggressive remediation.

(b) Each petition shall be submitted in accordance with the procedures in 40 CFR 260.20.

(c) Each petition shall include the following statement signed by the petitioner or an authorized representative:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this petition and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

(d) After receiving a petition for variance from a treatment standard, the Administrator may request any additional information or samples which he may require to evaluate the petition. Additional copies of the complete petition may be requested as needed to send to affected states and Regional Offices.

(e) The Administrator shall give public notice in the Federal Register of the intent to approve or deny a petition and provide an opportunity for public comment. The final decision on a variance from a treatment standard shall be published in the Federal Register.

(f) A generator, treatment facility, or disposal facility that is managing a waste covered by a variance from the treatment standards shall comply with the waste analysis requirements for restricted wastes found under Section R315-268-7.

(g) During the petition review process, the applicant is required to comply with all restrictions on land disposal under Rule R315-268 once the effective date for the waste has been reached.

(h) Based on a petition filed by a generator or treater of hazardous waste, the Director may approve a site-specific variance from an applicable treatment standard if:

(1) It is not physically possible to treat the waste to the level specified in the treatment standard, or by the method specified as the treatment standard. To show that this is the case, the petitioner shall demonstrate that because the physical or chemical properties of the waste differ significantly from waste analyzed in developing the treatment standard, the waste cannot be treated to the specified level or by the specified method; or

(2) It is inappropriate to require the waste to be treated to the level specified in the treatment standard or by the method specified as the treatment standard, even though such treatment is technically possible. To show that this is the case, the petitioner shall either demonstrate that:

(i) Treatment to the specified level or by the specified method is technically inappropriate, for example, resulting in combustion of large amounts of mildly contaminated environmental media where the treatment standard is not based on combustion of such media; or

(ii) For remediation waste only, treatment to the specified level or by the specified method is environmentally inappropriate because it would likely discourage aggressive remediation.

(3) For contaminated soil only, treatment to the level or by the method specified in the soil treatment standards would result in concentrations of hazardous constituents that are below, i.e., lower than, the concentrations necessary to minimize short- and long-term threats to human health and the environment. Treatment variances approved under Subsection R315-268-44(h) shall:

(i) At a minimum, impose alternative land disposal restriction treatment standards that, using a reasonable maximum exposure scenario:

(A) For carcinogens, achieve constituent concentrations that result in the total excess risk to an individual exposed over a lifetime generally falling within a range from 10⁻⁴ to 10⁻⁶; and

(B) For constituents with non-carcinogenic effects, achieve constituent concentrations that an individual could be exposed to on a daily basis without appreciable risk of deleterious effect during a lifetime.

(ii) Not consider post-land-disposal controls.

(4) For contaminated soil only, treatment to the level or by the method specified in the soil treatment standards would result in concentrations of hazardous constituents that are below, i.e., lower than, natural background concentrations at the site where the contaminated soil will be land disposed.

(5) Public notice and a reasonable opportunity for public comment shall be provided before granting or denying a petition.

(i) Each application for a site-specific variance from a treatment standard shall include the information in Subsections R315-260-20(b)(1)-(4);

(j) After receiving an application for a site-specific variance from a treatment standard, the Director may request any additional information or samples which may be required to evaluate the application.

(k) A generator, treatment facility, or disposal facility that is managing a waste covered by a site-specific variance from a treatment standard shall comply with the waste analysis requirements for restricted wastes found under Section R315-268-7.

(l) During the application review process, the applicant for a site-specific variance shall comply with all restrictions on land disposal under Rule R315-268 once the effective date for the waste has been reached.

(m) For all variances, the petitioner shall also demonstrate that compliance with any given treatment variance is sufficient to minimize threats to human health and the environment posed by land disposal of the waste. In evaluating this demonstration, EPA or the Director, whichever is applicable, may take into account whether a treatment variance should be approved if the subject waste is to be used in a manner constituting disposal pursuant to Sections R315-266-20 through 23.

(n) (Reserved)

(o) The following facilities are excluded from the treatment standards under Section R315-268-40, and are subject to the following constituent concentrations:

EnergySolutions LLC, Clive, UT -- This site-specific treatment variance applies only to solid treatment residue resulting from the vacuum thermal desorption (VTD) of P- and U-listed hazardous waste containing radioactive contamination, "mixed waste," at the EnergySolutions' LLC facility in Clive, Utah that otherwise requires CMBST as the LDR treatment standard. Once the P- and U-listed mixed waste are treated using VTD, the solid treatment residue can be land disposed at EnergySolutions' onsite RCRA permitted mixed waste landfill without further treatment. This treatment variance is conditioned on EnergySolutions complying with a Waste Family Demonstration Testing Plan specifically addressing the treatment of these P- and U-listed wastes, with this plan being implemented through a RCRA Part B permit modification for the VTD unit.

R315-268-45. Land Disposal Restrictions -- Treatment Standards for Hazardous Debris.

(a) Treatment standards. Hazardous debris shall be treated prior to land disposal as follows unless the Director determines under Subsection R315-261-3(f)(2) that the debris is no longer

contaminated with hazardous waste or the debris is treated to the waste-specific treatment standard provided in Sections R315-268-40 through 49 for the waste contaminating the debris:

(1) General. Hazardous debris shall be treated for each "contaminant subject to treatment" defined by Subsection R315-268-45(b) using the technology or technologies identified in Table 1 of Section R315-268-45.

(2) Characteristic debris. Hazardous debris that exhibits the characteristic of ignitability, corrosivity, or reactivity identified under Sections R315-261-21, 22, and 23, respectively, shall be deactivated by treatment using one of the technologies identified in Table 1 of Section R315-268-45.

(3) Mixtures of debris types. The treatment standards of Table 1 in Section R315-268-45 shall be achieved for each type of debris contained in a mixture of debris types. If an immobilization technology is used in a treatment train, it shall be the last treatment technology used.

(4) Mixtures of contaminant types. Debris that is contaminated with two or more contaminants subject to treatment identified under Subsection R315-268-45(b) shall be treated for each contaminant using one or more treatment technologies identified in Table 1 of Section R315-268-45. If an immobilization technology is used in a treatment train, it shall be the last treatment technology used.

(5) Waste PCBs. Hazardous debris that is also a waste PCB under 40 CFR part 761 is subject to the requirements of either 40 CFR part 761 or the requirements of Section R315-268-45, whichever are more stringent.

(b) Contaminants subject to treatment. Hazardous debris shall be treated for each "contaminant subject to treatment." The contaminants subject to treatment shall be determined as follows:

(1) Toxicity characteristic debris. The contaminants subject to treatment for debris that exhibits the Toxicity Characteristic (TC) by Section R315-261-24 are those EP constituents for which the debris exhibits the TC toxicity characteristic.

(2) Debris contaminated with listed waste. The contaminants subject to treatment for debris that is contaminated with a prohibited listed hazardous waste are those constituents or wastes for which treatment standards are established for the waste under Section R315-268-40.

(3) Cyanide reactive debris. Hazardous debris that is reactive because of cyanide shall be treated for cyanide.

(c) Conditioned exclusion of treated debris. Hazardous debris that has been treated using one of the specified extraction or destruction technologies in Table 1 of Section R315-268-45 and that does not exhibit a characteristic of hazardous waste identified under Sections R315-261-20 through 24 after treatment is not a hazardous waste and need not be managed in a hazardous waste facility. Hazardous debris contaminated with a listed waste that is treated by an immobilization technology specified in Table 1 is a hazardous waste and shall be managed in a hazardous waste facility.

(d) Treatment residuals

(1) General requirements. Except as provided by Subsections R315-268-45(d)(2) and (d)(4):

(i) Residue from the treatment of hazardous debris shall be separated from the treated debris using simple physical or mechanical means; and

(ii) Residue from the treatment of hazardous debris is subject to the waste-specific treatment standards provided by Sections R315-268-40 through 49 for the waste contaminating the debris.

(2) Nontoxic debris. Residue from the deactivation of ignitable, corrosive, or reactive characteristic hazardous debris, other than cyanide-reactive, that is not contaminated with a contaminant subject to treatment defined by Subsection R315-268-45(b), shall be deactivated prior to land disposal and is not

subject to the waste-specific treatment standards of Sections R315-268-40 through 49.

(3) Cyanide-reactive debris. Residue from the treatment of debris that is reactive because of cyanide shall meet the treatment standards for D003 in "Treatment Standards for Hazardous Wastes" at Section R315-268-40.

(4) Ignitable nonwastewater residue. Ignitable nonwastewater residue containing equal to or greater than 10% total organic carbon is subject to the technology specified in the treatment standard for D001: Ignitable Liquids.

(5) Residue from spalling. Layers of debris removed by spalling are hazardous debris that remain subject to the treatment standards of Section R315-268-45.

Table 1-Alternative Treatment Standards For Hazardous Debris, including footnotes found in 40 CFR 268.45, 2015 edition, is adopted and incorporated by reference.

R315-268-46. Land Disposal Restrictions -- Alternative Treatment Standards Based on HTMR.

For the treatment standards previously found in Section R315-268-46, refer to Section R315-268-40.

R315-268-48. Land Disposal Restrictions -- Universal Treatment Standards.

(a) Table UTS identifies the hazardous constituents, along with the nonwastewater and wastewater treatment standard levels, that are used to regulate most prohibited hazardous wastes with numerical limits. For determining compliance with treatment standards for underlying hazardous constituents as defined in Subsection R315-268-2(i), these treatment standards may not be exceeded. Compliance with these treatment standards is measured by an analysis of grab samples, unless otherwise noted in the following Table UTS.

Table
Universal Treatment Standards (UTS)

Note: NA means not applicable

Regulated constituent common name	CAS ¹ number	Wastewater standard Concentration ² in mg/l	Nonwastewater standard Concentration ³ in mg/kg unless noted as "mg/l TCLP"	
Organic Constituents				
Acenaphthylene	208-96-8	0.059	3.4	
Acenaphthene	83-32-9	0.059	3.4	
Acetone	67-64-1	0.28	160	
Acetonitrile	75-05-8	5.6	38	
Acetophenone	96-86-2	0.010	9.72	
Acetylaminofluorene	53-96-3	0.059	140	
Acrolein	107-02-8	0.29	NA	
Acrylamide	79-06-1	19	23	
Acrylonitrile	107-13-1	0.24	84	
Aldrin	309-00-2	0.021	0.066	
4-Aminobiphenyl	92-67-1	0.13	NA	
Aniline	62-53-3	0.81	14	
o-Anisidine (2-methoxyaniline)	90-04-0	0.010	0.66	
Anthracene	120-12-7	0.059	3.4	
Aramite	140-57-8	0.36	NA	
alpha-BHC	319-84-6	0.00014	0.066	
beta-BHC	319-85-7	0.00014	0.066	
delta-BHC	319-86-8	0.023	0.066	
gamma-BHC	58-89-9	0.0017	0.066	
Benzene	71-43-2	0.14	10	
Benz(a)anthracene	56-55-3	0.059	3.4	
Benzal chloride	98-87-3	0.055	6.0	
Benzo(b)fluoranthene (difficult to distinguish from benzo(k)fluoranthene)	205-99-2	0.11	6.8	
Benzo(k)fluoranthene (difficult to distinguish from benzo(b)fluoranthene)	207-08-9	0.11	6.8	

Benzo(g,h,i)perylene	191-24-2	0.0055	1.8
Benzo(a)pyrene	50-32-8	0.061	3.4
Bromodichloromethane	75-27-4	0.35	15
Bromomethane/Methyl bromide	74-83-9	0.11	15
4-Bromophenyl phenyl ether	101-55-3	0.055	15
n-Butyl alcohol	71-36-3	5.6	2.6
Butyl benzyl phthalate	85-68-7	0.017	28
2-sec-Butyl-4,6-dinitrophenol/Dinoseb	88-85-7	0.066	2.5
Carbon disulfide	75-15-0	3.8	4.8 mg/l TCLP
Carbon tetrachloride	56-23-5	0.057	6.0
Chlordane (alpha and gamma isomers)	57-74-9	0.0033	0.26
p-Chloroaniline	106-47-8	0.46	16
Chlorobenzene	108-90-7	0.057	6.0
Chlorobenzilate	510-15-6	0.10	NA
2-Chloro-1,3-butadiene	126-99-8	0.057	0.28
Chlorodibromomethane	124-48-1	0.057	15
Chloroethane	75-00-3	0.27	6.0
bis(2-Chloroethoxy) methane	111-91-1	0.036	7.2
bis(2-Chloroethyl)ether	111-44-4	0.033	6.0
Chloroform	67-66-3	0.046	6.0
bis(2-Chloroisopropyl) ether	39638-32-9	0.055	7.2
p-Chloro-m-cresol	59-50-7	0.018	14
2-Chloroethyl vinyl ether	110-75-8	0.062	NA
Chloromethane/Methyl chloride	74-87-3	0.19	30
2-Chloronaphthalene	91-58-7	0.055	5.6
2-Chloropchenol	95-57-8	0.044	5.7
3-Chloropropylene	107-05-1	0.036	30
Chrysene	218-01-9	0.059	3.4
p-Cresidine	120-71-8	0.010	0.66
o-Cresol	95-48-7	0.11	5.6
m-Cresol (difficult to distinguish from p-cresol)	108-39-4	0.77	5.6
p-Cresol (difficult to distinguish from m-cresol)	106-44-5	0.77	5.6
Cyclohexanone	108-94-1	0.36	0.75 mg/l TCLP
o,p'-DDD	53-19-0	0.023	0.087
p,p'-DDD	72-54-8	0.023	0.087
o,p'-DDE	3424-82-6	0.031	0.087
p,p'-DDE	72-55-9	0.031	0.087
o,p'-DDT	789-02-6	0.0039	0.087
p,p'-DDT	50-29-3	0.0039	0.087
Dibenz(a,h)anthracene	53-70-3	0.055	8.2
Dibenz(a,e)pyrene	192-65-4	0.061	NA
1,2-Dibromo-3-chloropropane	96-12-8	0.11	15
1,2-Dibromoethane/Ethylene dibromide	106-93-4	0.028	15
Dibromomethane	74-95-3	0.11	15
m-Dichlorobenzene	541-73-1	0.036	6.0
o-Dichlorobenzene	95-50-1	0.088	6.0
p-Dichlorobenzene	106-46-7	0.090	6.0
Dichlorodifluoromethane	75-71-8	0.23	7.2
1,1-Dichloroethane	75-34-3	0.059	6.0
1,2-Dichloroethane	107-06-2	0.21	6.0
1,1-Dichloroethylene	75-35-4	0.025	6.0
trans-1,2-Dichloroethylene	156-60-5	0.054	30
2,4-Dichlorophenol	120-83-2	0.044	14
2,6-Dichlorophenol	87-65-0	0.044	14
2,4-Dichlorophenoxyacetic acid/2,4-D	94-75-7	0.72	10
1,2-Dichloropropane	78-87-5	0.85	18
cis-1,3-Dichloropropylene	10061-01-5	0.036	18
trans-1,3-Dichloropropylene	10061-02-6	0.036	18
Dieldrin	60-57-1	0.017	0.13
Diethyl phthalate	84-66-2	0.20	28
p-Dimethylaminoazobenzene	60-11-7	0.13	NA
2,4-Dimethylaniline (2,4-xylidine)	95-68-1	0.010	0.66
2,4-Dimethyl phenol	105-67-9	0.036	14
Dimethyl phthalate	131-11-3	0.047	28
Di-n-butyl phthalate	84-74-2	0.057	28
1,4-Dinitrobenzene	100-25-4	0.32	2.3
4,6-Dinitro-o-cresol	534-52-1	0.28	160

2,4-Dinitrophenol	51-28-5	0.12	160	Nitrosomethylethylamine			
2,4-Dinitrotoluene	121-14-2	0.32	140	N-Nitrosomorpholine	59-89-2	0.40	2.3
2,6-Dinitrotoluene	606-20-2	0.55	28	N-Nitrosopiperidine	100-75-4	0.013	35
Di-n-octyl phthalate	117-84-0	0.017	28	N-Nitrosopyrrolidine	930-55-2	0.013	35
Di-n-propylnitrosamine	621-64-7	0.40	14	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	3268-87-9	0.000063	0.005
1,4-Dioxane	123-91-1	12.0	170	1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	39001-02-0	0.000063	0.005
Diphenylamine (difficult to distinguish from diphenylnitrosamine)	86-30-6	0.92	13	Parathion	56-38-2	0.014	4.6
Diphenylnitrosamine (difficult to distinguish from diphenylamine)				Total PCBs (sum of all PCB isomers, or all Aroclors) ⁶	1336-36-3	0.10	10
1,2-Diphenylhydrazine	122-66-7	0.087	NA	Pentachlorobenzene	608-93-5	0.055	10
Disulfoton	298-04-4	0.017	6.2	PeCDDs (All)	NA	0.000063	0.001
Endosulfan I	959-98-8	0.023	0.066	Pentachlorodibenzo-p-dioxins)			
Endosulfan II	33213-65-9	0.029	0.13	PeCDFs (All)	NA	0.000035	0.001
Endosulfan sulfate	1031-07-8	0.029	0.13	Pentachlorodibenzofurans)			
Endrin	72-20-8	0.0028	0.13	Pentachloroethane	76-01-7	0.055	6.0
Endrin aldehyde	7421-93-4	0.025	0.13	Pentachloronitrobenzene	82-68-8	0.055	4.8
Ethyl acetate	141-78-6	0.34	33	Pentachlorophenol	87-86-5	0.089	7.4
Ethyl benzene	100-41-4	0.057	10	Phenacetin	62-44-2	0.081	16
Ethyl cyanide/Propanenitrile	107-12-0	0.24	360	Phenanthrene	85-01-8	0.059	5.6
Ethyl ether	60-29-7	0.12	160	Phenol	108-95-2	0.039	6.2
bis(2-Ethylhexyl)phthalate	117-81-7	0.28	28	1,3-Phenylenediamine	108-45-2	0.010	0.66
Ethyl methacrylate	97-63-2	0.14	160	Phorate	298-02-2	0.021	4.6
Ethylene oxide	75-21-8	0.12	NA	Phthalic acid	100-21-0	0.055	28
Famphur	52-85-7	0.017	15	Phthalic anhydride	85-44-9	0.055	28
Fluoranthene	206-44-0	0.068	3.4	Pronamide	23950-58-5	0.093	1.5
Fluorene	86-73-7	0.059	3.4	Pyrene	129-00-0	0.067	8.2
Heptachlor	76-44-8	0.0012	0.066	Pyridine	110-86-1	0.014	16
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (1,2,3,4,6,7,8-HpCDD)	35822-46-9	0.000035	.0025	Safrole	94-59-7	0.081	22
1,2,3,4,6,7,8-Heptachlorodibenzofuran (1,2,3,4,6,7,8-HpCDF)	67562-39-4	0.000035	.0025	Silvex/2,4,5-TP	93-72-1	0.72	7.9
1,2,3,4,7,8,9-Heptachlorodibenzofuran (1,2,3,4,7,8,9-HpCDF)	55673-89-7	0.000035	.0025	1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
Heptachlor epoxide	1024-57-3	0.016	0.066	TCDDs (All)	NA	0.000063	0.001
Hexachlorobenzene	118-74-1	0.055	10	Tetrachlorodibenzo-p-dioxins)			
Hexachlorobutadiene	87-68-3	0.055	5.6	TCDFs (All)	NA	0.000063	0.001
Hexachlorocyclopentadiene	77-47-4	0.057	2.4	Tetrachlorodibenzofurans)			
HxCDDs (All)	NA	0.000063	0.001	1,1,1,2-Tetrachloroethane	630-20-6	0.057	6.0
Hexachlorodibenzo-p-dioxins)				1,1,2,2-Tetrachloroethane	79-34-5	0.057	6.0
HxCDFs (All)	NA	0.000063	0.001	Tetrachloroethane			
Hexachlorodibenzofurans)				Tetrachloroethylene	127-18-4	0.056	6.0
Hexachloroethane	67-72-1	0.055	30	2,3,4,6-Tetrachlorophenol	58-90-2	0.030	7.4
Hexachloropropylene	1888-71-7	0.035	30	Toluene	108-88-3	0.080	10
Indeno(1,2,3-c,d)pyrene	193-39-5	0.0055	3.4	Toxaphene	8001-35-2	0.0095	2.6
Iodomethane	74-88-4	0.19	65	Tribromomethane/Bromoform	75-25-2	0.063	15
Isobutyl alcohol	78-83-1	5.6	170	1,2,4-Trichlorobenzene	120-82-1	0.055	19
Isodrin	465-73-6	0.021	0.066	1,1,1-Trichloroethane	71-55-6	0.054	6.0
Isosafrole	120-58-1	0.081	2.6	1,1,2-Trichloroethane	79-00-5	0.054	6.0
Kepone	143-50-0	0.0011	0.13	Trichloroethylene	79-01-6	0.054	6.0
Methacrylonitrile	126-98-7	0.24	84	Trichlorofluoromethane	75-69-4	0.020	30
Methanol	67-56-1	5.6	.75 mg/l	2,4,5-Trichlorophenol	95-95-4	0.18	7.4
Methapyrilene	91-80-5	0.081	1.5	2,4,6-Trichlorophenol	88-06-2	0.035	7.4
Methoxychlor	72-43-5	0.25	0.18	2,4,5-Trichlorophenoxyacetic acid/2,4,5-T	93-76-5	0.72	7.9
3-Methylcholanthrene	56-49-5	0.0055	15	1,2,3-Trichloropropane	96-18-4	0.85	30
4,4-Methylene bis(2-chloroaniline)	101-14-4	0.50	30	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.057	30
Methylene chloride	75-09-2	0.089	30	tris-(2,3-Dibromopropyl)phosphate	126-72-7	0.11	0.10
Methyl ethyl ketone	78-93-3	0.28	36	Vinyl chloride	75-01-4	0.27	6.0
Methyl isobutyl ketone	108-10-1	0.14	33	Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	0.32	30
Methyl methacrylate	80-62-6	0.14	160	Inorganic Constituents			
Methyl methanesulfonate	66-27-3	0.018	NA	Antimony	7440-36-0	1.9	1.15 mg/l
Methyl parathion	298-00-0	0.014	4.6	Arsenic	7440-38-2	1.4	5.0 mg/l
Naphthalene	91-20-3	0.059	5.6	Barium	7440-39-3	1.2	21 mg/l
2-Naphthylamine	91-59-8	0.52	NA	Beryllium	7440-41-7	0.82	1.22 mg/l
o-Nitroaniline	88-74-4	0.27	14	Cadmium	7440-43-9	0.69	0.11 mg/l
p-Nitroaniline	100-01-6	0.028	28	Chromium (Total)	7440-47-3	2.77	0.60 mg/l
Nitrobenzene	98-95-3	0.068	14	Cyanides (Total) ⁴	57-12-5	1.2	590
5-Nitro-o-toluidine	99-55-8	0.32	28	Cyanides (Amenable) ⁴	57-12-5	0.86	30
o-Nitrophenol	88-75-5	0.028	13	Fluoride ⁵	16984-48-8	35	NA
p-Nitrophenol	100-02-7	0.12	29				
N-Nitrosodiethylamine	55-18-5	0.40	28				
N-Nitrosodimethylamine	62-75-9	0.40	2.3				
N-Nitroso-di-n-butylamine	924-16-3	0.40	17				
N-	10595-95-6	0.40	2.3				

Lead	7439-92-1	0.69	0.75 mg/l TCLP	the soil*			
Mercury---Nonwastewater	7439-97-6	NA	0.20 mg/l TCLP	Didn't apply to the listed waste when it contaminated the soil*	Apply to the listed waste now	The soil is determined not to contain the listed waste when the soil is first generated	Need not comply with LDRs.
From Retort							
Mercury-All Others	7439-97-6	0.15	0.025 mg/l TCLP	Didn't apply to the listed waste when it contaminated the soil*	Don't apply to the listed waste now		Need not comply with LDRs.
Nickel	7440-02-0	3.98	11 mg/l TCLP	Didn't apply to the listed waste when it contaminated the soil*			Need not comply with LDRs.
Selenium ⁷	7782-49-2	0.82	5.7 mg/l TCLP				
Silver	7440-22-4	0.43	0.14 mg/l TCLP				
Sulfide ⁵	18496-25-8	14	NA				
Thallium	7440-28-0	1.4	0.20 mg/l TCLP				
Vanadium ⁵	7440-62-2	4.3	1.6 mg/l TCLP				
Zinc ⁵	7440-66-6	2.61	4.3 mg/l TCLP				

*For dates of LDR applicability, see Rule R315-268 Appendix VII. To determine the date any given listed hazardous waste contaminated any given volume of soil, use the last date any given listed hazardous waste was placed into any given land disposal unit or, in the case of an accidental spill, the date of the spill.

Footnotes to Table UTS

- 1 CAS means Chemical Abstract Services. When the waste code and/or regulated constituents are described as a combination of a chemical with its salts and/or esters, the CAS number is given for the parent compound only.
- 2 Concentration standards for wastewaters are expressed in mg/l and are based on analysis of composite samples.
- 3 Except for Metals (EP or TCLP) and Cyanides (Total and Amenable) the nonwastewater treatment standards expressed as a concentration were established, in part, based upon incineration in units operated in accordance with the technical requirements of Sections R315-264-340 through 351 or 40 CFR 265.340 through 352, which are adopted by reference, or based upon combustion in fuel substitution units operating in accordance with applicable technical requirements. A facility may comply with these treatment standards according to provisions in Subsection R315-268-40(d).
All concentration standards for nonwastewaters are based on analysis of grab samples.
- 4 Both Cyanides (Total) and Cyanides (Amenable) for nonwastewaters are to be analyzed using Method 9010C or 9012B, found in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference in Section R315-260-11, with a sample size of 10 grams and a distillation time of one hour and 15 minutes.
- 5 These constituents are not "underlying hazardous constituents" in characteristic wastes, according to the definition at Subsection R315-268-2(i).
- 6 Reserved
- 7 This constituent is not an underlying hazardous constituent as defined at Subsection R315-268-2(i) because its UTS level is greater than its TC level, thus a treatment selenium waste would always be characteristically hazardous, unless it is treated to below its characteristic level.
- 8 This standard is temporarily deferred for soil exhibiting a hazardous characteristic due to D004-D011 only.

R315-268-49. Land Disposal Restrictions -- Alternative LDR Treatment Standards for Contaminated Soil.

(a) Applicability. You shall comply with LDRs prior to placing soil that exhibits a characteristic of hazardous waste, or exhibited a characteristic of hazardous waste at the time it was generated, into a land disposal unit. The following chart describes whether you shall comply with LDRs prior to placing soil contaminated by listed hazardous waste into a land disposal unit:

Table			
If LDRs	And if LDRs	And if	Then you
Applied to the listed waste when it contaminated the soil*	Apply to the listed waste now		Shall comply with LDRs.
Didn't apply to the listed waste when it contaminated	Apply to the listed waste now	The soil is determined to contain the listed waste when the soil is first generated	Shall comply with LDRs.

(b) Prior to land disposal, contaminated soil identified by Subsection R315-268-49(a) as needing to comply with LDRs shall be treated according to the applicable treatment standards specified in Subsection R315-268-49(c) or according to the Universal Treatment Standards specified in Section R315-268-48 applicable to the contaminating listed hazardous waste and/or the applicable characteristic of hazardous waste if the soil is characteristic. The treatment standards specified in Subsection R315-268-49(c) and the Universal Treatment Standards may be modified through a treatment variance approved in accordance with Section R315-268-44.

(c) Treatment standards for contaminated soils. Prior to land disposal, contaminated soil identified by Subsection R315-268-49(a) as needing to comply with LDRs shall be treated according to all the standards specified in Subsection R315-268-49(c) or according to the Universal Treatment Standards specified in Section R315-268-48.

(1) All soils. Prior to land disposal, all constituents subject to treatment shall be treated as follows:

(A) For non-metals except carbon disulfide, cyclohexanone, and methanol, treatment shall achieve 90 percent reduction in total constituent concentrations, except as provided by Subsection R315-268-49(c)(1)(C).

(B) For metals and carbon disulfide, cyclohexanone, and methanol, treatment shall achieve 90 percent reduction in constituent concentrations as measured in leachate from the treated media, tested according to the TCLP, or 90 percent reduction in total constituent concentrations, when a metal removal treatment technology is used, except as provided by Subsection R315-268-49(c)(1)(C).

(C) When treatment of any constituent subject to treatment to a 90 percent reduction standard would result in a concentration less than 10 times the Universal Treatment Standard for that constituent, treatment to achieve constituent concentrations less than 10 times the universal treatment standard is not required. Universal Treatment Standards are identified in Section R315-268-48 Table UTS.

(2) Soils that exhibit the characteristic of ignitability, corrosivity or reactivity. In addition to the treatment required by Subsection R315-268-49(c)(1), prior to land disposal, soils that exhibit the characteristic of ignitability, corrosivity, or reactivity shall be treated to eliminate these characteristics.

(3) Soils that contain nonanalyzable constituents. In addition to the treatment requirements of Subsections R315-268-49(c)(1) and (2), prior to land disposal, the following treatment is required for soils that contain nonanalyzable constituents:

(A) For soil that contains only analyzable and nonanalyzable organic constituents, treatment of the analyzable organic constituents to the levels specified in Subsections R315-268-49(c)(1) and (2); or,

(B) For soil that contains only nonanalyzable constituents, treatment by the method(s) specified in Section R315-268-42

for the waste contained in the soil.

(d) Constituents subject to treatment. When applying the soil treatment standards in Subsection R315-268-49(c), constituents subject to treatment are any constituents listed in Section R315-268-48 Table UTS-Universal Treatment Standards that are reasonably expected to be present in any given volume of contaminated soil, except fluoride, selenium, sulfides, vanadium, zinc, and that are present at concentrations greater than ten times the universal treatment standard. PCBs are not constituent subject to treatment in any given volume of soil which exhibits the toxicity characteristic solely because of the presence of metals.

(e) Management of treatment residuals. Treatment residuals from treating contaminated soil identified by Subsection R315-268-49(a) as needing to comply with LDRs shall be managed as follows:

(1) Soil residuals are subject to the treatment standards of Section R315-268-49;

(2) Non-soil residuals are subject to:

(A) For soils contaminated by listed hazardous waste, the hazardous waste standards applicable to the listed hazardous waste; and

(B) For soils that exhibit a characteristic of hazardous waste, if the non-soil residual also exhibits a characteristic of hazardous waste, the treatment standards applicable to the characteristic hazardous waste.

R315-268-50. Land Disposal Restrictions -- Prohibitions on Storage of Restricted Wastes.

(a) Except as provided in Section R315-268-50, the storage of hazardous wastes restricted from land disposal under Sections R315-268-20 through 39 is prohibited, unless the following conditions are met:

(1) A generator stores such wastes in tanks, containers, or containment buildings on-site solely for the purpose of the accumulation of such quantities of hazardous waste as necessary to facilitate proper recovery, treatment, or disposal and the generator complies with the requirements in Sections R315-262-16 and R315-262-17, and Rules R315-264 and R315-265.

(2) An owner/operator of a hazardous waste treatment, storage, or disposal facility stores such wastes in tanks, containers, or containment buildings solely for the purpose of the accumulation of such quantities of hazardous waste as necessary to facilitate proper recovery, treatment, or disposal and:

(i) Each container is clearly marked to identify its contents and with:

(A) The words "Hazardous Waste";

(B) The applicable EPA hazardous waste number(s), EPA hazardous waste codes, in Sections R315-261-20 through R315-261-24 and R315-261-30 through R315-261-35; or use a nationally recognized electronic system, such as bar coding, to identify the EPA hazardous waste number(s);

(C) An indication of the hazards of the contents, examples include:

(I) the applicable hazardous waste characteristic(s), i.e., ignitable, corrosive, reactive, toxic;

(II) hazard communication consistent with the Department of Transportation requirements at 49 CFR part 172 subpart E, labeling, or subpart F, placarding;

(III) a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at 29 CFR 1910.1200; or

(IV) a chemical hazard label consistent with the National Fire Protection Association code 704; and

(D) The date each period of accumulation begins;

(ii) Each tank is clearly marked with a description of its contents, the quantity of each hazardous waste received, and the date each period of accumulation begins, or such information for

each tank is recorded and maintained in the operating record at that facility. Regardless of whether the tank itself is marked, an owner/operator shall comply with the operating record requirements specified in Section R315-264-73 or 40 CFR 265.73, which are adopted by reference.

(3) A transporter stores manifested shipments of such wastes at a transfer facility for 10 days or less.

(b) An owner/operator of a treatment, storage or disposal facility may store such wastes for up to one year unless the Director can demonstrate that such storage was not solely for the purpose of accumulation of such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment, or disposal.

(c) An owner/operator of a treatment, storage or disposal facility may store such wastes beyond one year; however, the owner/operator bears the burden of proving that such storage was solely for the purpose of accumulation of such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment, or disposal.

(d) If a generator's waste is exempt from a prohibition on the type of land disposal utilized for the waste, for example, because of an approved case-by-case extension under Section R315-268-5, an approved Section R315-268-6 petition, or a national capacity variance under Sections R315-268-20 through 39, the prohibition in Subsection R315-268-50(a) does not apply during the period of such exemption.

(e) The prohibition in Subsection R315-268-50(a) does not apply to hazardous wastes that meet the treatment standards specified under Sections R315-268-41, 42, and 43 or the treatment standards specified under the variance in Section R315-268-44, or, where treatment standards have not been specified, is in compliance with the applicable prohibitions specified in Section R315-268-32 or RCRA section 3004.

(f) Liquid hazardous wastes containing polychlorinated biphenyls (PCBs) at concentrations greater than or equal to 50 ppm shall be stored at a facility that meets the requirements of 40 CFR 761.65(b) and shall be removed from storage and treated or disposed as required by Rule R315-268 within one year of the date when such wastes are first placed into storage. The provisions of Subsection R315-268-50(c) do not apply to such PCB wastes prohibited under Section R315-268-32.

(g) The prohibition and requirements in Section R315-268-50 do not apply to hazardous remediation wastes stored in a staging pile approved pursuant to Section R315-264-554.

R315-268-51. Appendix III to Rule R315-268 - List of Halogenated Organic Compounds Regulated Under Section R315-268-32.

In determining the concentration of HOCs in a hazardous waste for purposes of the Section R315-268-32 land disposal prohibition, the Director has defined the HOCs that shall be included in a calculation as any compounds having a carbon-halogen bond which are listed in this Appendix, see Section R315-268-2. Appendix III to Rule R315-268 consists of the following compounds:

- I. Volatiles
 1. Bromodichloromethane
 2. Bromomethane
 3. Carbon Tetrachloride
 4. Chlorobenzene
 5. 2-Chloro-1,3-butadiene
 6. Chlorodibromomethane
 7. Chloroethane
 8. 2-Chloroethyl vinyl ether
 9. Chloroform
 10. Chloromethane
 11. 3-Chloropropene
 12. 1,2-Dibromo-3-chloropropane
 13. 1,2-Dibromomethane

14. Dibromomethane
15. Trans-1,4-Dichloro-2---butene
16. Dichlorodifluoromethane
17. 1,1-Dichloroethane
18. 1,2-Dichloroethane
19. 1,1-Dichloroethylene
20. Trans-1,2-Dichloroethene
21. 1,2-Dichloropropane
22. Trans-1,3-Dichloropropene
23. cis-1,3-Dichloropropene
24. Iodomethane
25. Methylene chloride
26. 1,1,1,2-Tetrachloroethane
27. 1,1,2,2-Tetrachloroethane
28. Tetrachloroethene
29. Tribromomethane
30. 1,1,1-Trichloroethane
31. 1,1,2-Trichloroethane
32. Trichloroethene
33. Trichloromonofluoromethane
34. 1,2,3-Trichloropropane
35. Vinyl Chloride
- II. Semivolatiles
 1. Bis(2-chloroethoxy)ethane
 2. Bis(2-chloroethyl)ether
 3. Bis(2-chloroisopropyl)ether
 4. p-Chloroaniline
 5. Chlorobenzilate
 6. p-Chloro-m-cresol
 7. 2-Chloronaphthalene
 8. 2-Chlorophenol
 9. 3-Chloropropionitrile
 10. m-Dichlorobenzene
 11. o-Dichlorobenzene
 12. p-Dichlorobenzene
 13. 3,3'-Dichlorobenzidine
 14. 2,4-Dichlorophenol
 15. 2,6-Dichlorophenol
 16. Hexachlorobenzene
 17. Hexachlorobutadiene
 18. Hexachlorocyclopentadiene
 19. Hexachloroethane
 20. Hexachloropropane
 21. Hexachloropropene
 22. 4,4'-Methylenebis(2-chloroaniline)
 23. Pentachlorobenzene
 24. Pentachloroethane
 25. Pentachloronitrobenzene
 26. Pentachlorophenol
 27. Pronamide
 28. 1,2,4,5-Tetrachlorobenzene
 29. 2,3,4,6-Tetrachlorophenol
 30. 1,2,4-Trichlorobenzene
 31. 2,4,5-Trichlorophenol
 32. 2,4,6-Trichlorophenol
 33. Tris(2,3-dibromopropyl)phosphate
- III. Organochlorine Pesticides
 1. Aldrin
 2. alpha-BHC
 3. beta-BHC
 4. delta-BHC
 5. gamma-BHC
 6. Chlorodane
 7. DDD
 8. DDE
 9. DDT
 10. Dieldrin
 11. Endosulfan I
 12. Endosulfan II

13. Endrin
14. Endrin aldehyde
15. Heptachlor
16. Heptachlor epoxide
17. Isodrin
18. Kepone
19. Methoxychlor
20. Toxaphene
- IV. Phenoxyacetic Acid Herbicides
 1. 2,4-Dichlorophenoxyacetic acid
 2. Silvex
 3. 2,4,5-T
- V. PCBs
 1. Aroclor 1016
 2. Aroclor 1221
 3. Aroclor 1232
 4. Aroclor 1242
 5. Aroclor 1248
 6. Aroclor 1254
 7. Aroclor 1260
 8. PCBs not otherwise specified
- VI. Dioxins and Furans
 1. Hexachlorodibenzo-p-dioxins
 2. Hexachlorodibenzofuran
 3. Pentachlorodibenzo-p-dioxins
 4. Pentachlorodibenzofuran
 5. Tetrachlorodibenzo-p-dioxins
 6. Tetrachlorodibenzofuran
 7. 2,3,7,8-Tetrachlorodibenzo-p-dioxin

R315-268-52. Appendix IV to Rule R315-268 - Wastes Excluded from Lab Packs Under the Alternative Treatment Standards of Subsection R315-268-42(c).

Hazardous waste with the following EPA Hazardous Waste Codes may not be placed in lab packs under the alternative lab pack treatment standards of Subsection R315-268-42(c): D009, F019, K003, K004, K005, K006, K062, K071, K100, K106, P010, P011, P012, P076, P078, U134, U151.

R315-268-53. Appendix VI to Rule R315-268 - Recommended Technologies to Achieve Deactivation of Characteristics in Section R315-268-42.

The treatment standard for many characteristic wastes is stated in the Section R315-268-40 Table of Treatment Standards as "Deactivation and meet UTS." The Director has determined that many technologies, when used alone or in combination, can achieve the deactivation portion of the treatment standard. Characteristic wastes that are not managed in a facility regulated by the Clean Water Act (CWA) or in a CWA-equivalent facility, and that also contain underlying hazardous constituents, see Subsection R315-268-2(i), shall be treated not only by a "deactivating" technology to remove the characteristic, but also to achieve the universal treatment standards (UTS) for underlying hazardous constituents. The following appendix presents a partial list of technologies, utilizing the five letter technology codes established in Section R315-268-42 Table 1, that may be useful in meeting the treatment standard. Use of these specific technologies is not mandatory and does not preclude direct reuse, recovery, and/or the use of other pretreatment technologies, provided deactivation is achieved and underlying hazardous constituents are treated to achieve the UTS.

Table

Waste code/subcategory	Nonwastewaters	Wastewaters
D001 Ignitable Liquids based on	RORGS	n.a.
R315-261-21(a)(1)-Low TOC	INCIN	
Nonwastewater Subcategory,	WETOX	
containing 1% to <10% TOC	CHOXD	
	BIOG	

			LDRS ^a -- Comprehensive List		
			Waste Code	Waste category	Effective date
D001 Ignitable Liquids based on Subsection R315-261-21(a)(1) -Ignitable Wastewater Subcategory, containing <1% TOC	n.a.	RORGS INCIN WETOX CHOXD BIOGG	D001 ^c	All (except High TOC Ignitable Liquids)	Aug. 9, 1993.
D001 Compressed Gases based on Subsection R315-261-21(A)(3)	RCGAS INCIN FSUBS ADGAS fb. ADGAS fb. (or CHRED)	n.a. INCIN (CHOXD;	D001 D002 ^c D003	High TOC Ignitable Liquids, All Newly identified surface-disposed elemental phosphorus processing wastes.	Aug. 8, 1990. Aug. 9, 1993. May 26, 2000
D001 Ignitable Reactives based on Subsection R315-261-21(a)(2)	WTRRX CHOXD CHRED STABL INCIN	n.a.	D004 D004	Newly identified D004 and mineral processing wastes Mixed radioactive/newly identified D004 or mineral processing wastes	Aug. 24, 1998. May 26, 2000
D001 Ignitable Oxidizers based on Subsection R315-261-21(a)(4)	CHRED INCIN	CHRED INCIN	D005 D005	Newly identified D005 and mineral processing wastes Mixed radioactive/newly identified D005 or mineral processing wastes	Aug. 24, 1998. May 26, 2000.
D002 Acid Subcategory based on Subsection R315-261-22(a)(1) with pH less than or equal to 2	RCORR NEUTR INCIN	NEUTR INCIN	D006 D006 D007	Newly identified D006 and mineral processing wastes Mixed radioactive/newly identified D006 or mineral processing wastes Newly identified D007 and mineral processing wastes	Aug. 24, 1998. May 26, 2000. Aug. 24, 1998.
D002 Alkaline Subcategory based on Subsection R315-261-22(a)(1) with pH greater than or equal to 12.5	NEUTR INCIN	NEUTR INCIN	D007 D007 D008	Mixed radioactive/newly identified D007 or mineral processing wastes Newly identified D008 and mineral processing waste	May 26, 2000. Aug. 24, 1998.
D002 Other Corrosives based on Subsection R315-261-22(a)(2)	CHOXD CHRED INCIN STABL	CHOXD CHRED INCIN	D009 D009 D010	Mixed radioactive/newly identified D009 and mineral processing waste Mixed radioactive/newly identified D009 or mineral processing wastes Newly identified D010 and mineral processing wastes	Aug. 24, 1998. May 26, 2000. Aug. 24, 1998.
D003 Water Reactives based on Subsections R315-268-23(a)(2), (3), and (4)	INCIN WTRRX CHOXD CHRED	n.a.	D010 D010 D011	Mixed radioactive/newly identified D010 or mineral processing wastes Newly identified D011 and mineral processing wastes	May 26, 2000. Aug. 24, 1998.
D003 Reactive Sulfides based on Subsection R315-261-23(a)(5)	CHOXD CHRED INCIN STABL	CHOXD CHRED BIOGG INCIN	D011 D012 (that exhibit the toxicity characteristic based on the TCLP) ^d	Mixed radioactive/newly identified D011 or mineral processing wastes All	May 26, 2000. Dec. 14, 1994
D003 Explosives based on Subsection R315-261-23(a)(6), (7), and (8)	INCIN CHOXD CHRED	INCIN CHOXD CHRED	D013 (that exhibit the toxicity characteristic based on the TCLP) ^d	All	Dec. 14, 1994
D003 Other Reactives based on Subsection R315-261-23(a)(1)	INCIN CHOXD CHRED	INCIN CHOXD CHRED BIOGG CARBN	D014 (that exhibit the toxicity characteristic based on the TCLP) ^d	All	Dec. 14, 1994
K044 Wastewater treatment sludges from the manufacturing and processing of explosives	CHOXD CHRED INCIN	CHOXD CHRED BIOGG CARBN INCIN	D015 (that exhibit the toxicity characteristic based on the TCLP) ^d	All	Dec. 14, 1994
K045 Spent carbon from the treatment of wastewaters containing explosives	CHOXD CHRED INCIN	CHOXD CHRED BIOGG CARBN INCIN	D016 (that exhibit the toxicity characteristic based on the TCLP) ^d	All	Dec. 14, 1994
K047 Pink/red water from TNT operations	CHOXD CHRED INCIN	CHOXD CHRED BIOGG CARBN INCIN	D017 (that exhibit the toxicity characteristic based on the TCLP) ^d	All	Dec. 14, 1994
Note: "n.a." stands for "not applicable"; "fb." stands for "followed by".			D018	Mixed with radioactive wastes	Sept. 19, 1996.
R315-268-54. Appendix VII to Rule R315-268 - LDR Effective Dates of Surface Disposed Prohibited Hazardous Wastes.			D018	All others	Dec. 19, 1994.
Table 1			D019	Mixed with radioactive wastes	Sept. 19, 1996.
Effective Dates of Surface Disposed Wastes, Non-Soil and Debris, Regulated in the			D019	All others	Dec. 19,

D020	Mixed with radioactive wastes	1994. Sept.19, 1996.	D042	Mixed with radioactive wastes	Sept.19, 1996.
D020	All others	Dec. 19, 1994.	D042	All others	Dec. 19, 1994.
D021	Mixed with radioactive wastes	Sept.19, 1996.	D043	Mixed with radioactive wastes	Sept.19, 1996.
D021	All others	Dec. 19, 1994.	D043	All others	Dec. 19, 1994.
D022	Mixed with radioactive wastes	Sept.19, 1996.	F001	Small quantity generators, CERCLA response/RCRA corrective action, initial generator's solvent-water mixtures, solvent-containing sludges and solids.	Nov. 8, 1988
D022	All others	Dec. 19, 1994.	F001	All others	Nov. 8, 1986.
D023	Mixed with radioactive wastes	Sept.19, 1996.	F002 (1,1,2- trichloroethane)	Wastewater and Nonwastewater	Aug. 8, 1990.
D023	All others	Dec. 19, 1994.	F002	Small quantity generators, CERCLA response/RCRA corrective action, initial generator's solvent-water mixtures, solvent-containing sludges and solids	Nov. 8, 1988
D024	Mixed with radioactive wastes	Sept.19, 1996.	F002	All others	Nov. 8, 1986.
D024	All others	Dec. 19, 1994.	F003	Small quantity generators, CERCLA response/RCRA corrective action, initial generator's solvent-water mixtures, solvent-containing sludges and solids,	Nov. 8, 1988.
D025	Mixed with radioactive wastes	Sept.19, 1996.	F003	All others	Nov. 8, 1986.
D025	All others	Dec. 19, 1994.	F004	Small quantity generators, CERCLA response/RCRA corrective action, initial generator's solvent-water mixtures, solvent-containing sludges and solids	Nov. 8, 1988.
D026	Mixed with radioactive wastes	Sept.19, 1996.	F004	All others	Nov. 8, 1986.
D026	All others	Dec. 19, 1994.	F005 (benzene, 2-ethoxy ethanol, 2-nitropropane)	Wastewater and Nonwastewater	Aug. 8, 1990.
D027	Mixed with radioactive wastes	Sept.19, 1996.	F005	Small quantity generators, CERCLA response/RCRA corrective action, initial generator's solvent-water mixtures, solvent-containing sludges and solids	Nov. 8, 1988.
D027	All others	Dec. 19, 1994.	F005	All others	Nov. 8, 1986.
D028	Mixed with radioactive wastes	Sept.19, 1996.	F006	Wastewater	Aug. 8, 1990.
D028	All others	Dec. 19, 1994.	F006	Nonwastewater	Aug. 8, 1988.
D029	Mixed with radioactive wastes	Sept.19, 1996.	F006 (cyanides)	Nonwastewater	July 8, 1989.
D029	All others	Dec. 19, 1994.	F007	All	July 8, 1989.
D030	Mixed with radioactive wastes	Sept.19, 1996.	F008	All	July 8, 1989.
D030	All others	Dec. 19, 1994.	F009	All	July 8, 1989.
D031	Mixed with radioactive wastes	Sept.19, 1996.	F010	All	July 8, 1989.
D031	All others	Dec. 19, 1994.	F011 (cyanides)	Nonwastewater	Dec. 8, 1989.
D032	Mixed with radioactive wastes	Sept.19, 1996.	F011	All others	July 8, 1989.
D032	All others	Dec. 19, 1994.	F012 (cyanides)	Nonwastewater	Dec. 8, 1989.
D033	Mixed with radioactive wastes	Sept.19, 1996.	F012	All others	July 8, 1989.
D033	All others	Dec. 19, 1994.	F019	All	Aug. 8, 1990.
D034	Mixed with radioactive wastes	Sept.19, 1996.	F020	All	Aug. 8, 1988.
D034	All others	Dec. 19, 1994.	F021	All	Aug. 8, 1988.
D035	Mixed with radioactive wastes	Sept.19, 1996.	F025	All	Aug. 8, 1990.
D035	All others	Dec. 19, 1994.	F026	All	Aug. 8, 1988.
D036	Mixed with radioactive wastes	Sept.19, 1996.	F027	All	Aug. 8, 1988.
D036	All others	Dec. 19, 1994.	F028	All	Aug. 8, 1988.
D037	Mixed with radioactive wastes	Sept.19, 1996.	F032	Mixed with radioactive wastes	May 12, 1999
D037	All others	Dec. 19, 1994.	F032	All others	Aug. 12,
D038	Mixed with radioactive wastes	Sept.19, 1996.			
D038	All others	Dec. 19, 1994.			
D039	Mixed with radioactive wastes	Sept.19, 1996.			
D039	All others	Dec. 19, 1994.			
D040	Mixed with radioactive wastes	Sept.19, 1996.			
D040	All others	Dec. 19, 1994.			
D041	Mixed with radioactive wastes	Sept.19, 1996.			
D041	All others	Dec. 19, 1994.			

F034	Mixed with radioactive wastes	1997. May 12, 1999	K023	All	June 8, 1989.
F034	All others	Aug. 12, 1997.	K024	All	Aug. 8, 1988.
F035	Mixed with radioactive wastes	May 12, 1999.	K025	Wastewater	Aug. 8, 1990.
F035	All others	Aug. 12, 1997.	K025	Nonwastewater	Aug. 8, 1988.
F037	Not generated from surface impoundment cleanouts or closures	June 30, 1993.	K026	All	Aug. 8, 1990.
F037	Generated from surface impoundment cleanouts or closures	June 30, 1994.	K027	All	June 8, 1989.
F037	Mixed with radioactive wastes	June 30, 1994.	K028 (metals)	Nonwastewater	Aug. 8, 1990.
F038	Not generated from surface impoundment cleanouts or closures	June 30, 1993.	K028	All others	June 8, 1989.
F038	Mixed with radioactive wastes	June 30, 1994.	K029	Wastewater	Aug. 8, 1990.
F038	Mixed with radioactive wastes	June 30, 1994.	K029	Nonwastewater	June 8, 1989.
F039	Wastewater	Aug. 8, 1990.	K030	All	Aug. 8, 1988.
F039	Nonwastewater	May 8, 1992.	K031	Wastewater	Aug. 8, 1990.
K001	All	Aug. 8, 1988.	K031	Nonwastewater	May 8, 1992.
K001 (organics) ^b	All others	Aug. 8, 1988.	K032	All	Aug. 8, 1990.
K002	All	Aug. 8, 1990.	K033	All	Aug. 8, 1990.
K003	All	Aug. 8, 1990.	K034	All	Aug. 8, 1990.
K004	Wastewater	Aug. 8, 1990.	K035	All	Aug. 8, 1990.
K004	Nonwastewater	Aug. 8, 1988.	K036	Wastewater	Aug. 8, 1990.
K005	Wastewater	Aug. 8, 1990.	K036	Nonwastewater	Aug. 8, 1988.
K005	Nonwastewater	June 8, 1989.	K037 ^b	Wastewater	Aug. 8, 1988.
K006	All	Aug. 8, 1990.	K037	Nonwastewater	Aug. 8, 1988.
K007	Wastewater	Aug. 8, 1990.	K038	All	June 8, 1989.
K007	Nonwastewater	June 8, 1989.	K039	All	June 8, 1989.
K008	Wastewater	Aug. 8, 1990.	K040	All	June 8, 1989.
K008	Nonwastewater	Aug. 8, 1988.	K041	All	Aug. 8, 1990.
K009	All	June 8, 1989.	K042	All	Aug. 8, 1990.
K010	All	June 8, 1989.	K043	All	June 8, 1989.
K011	Wastewater	Aug. 8, 1990.	K044	All	Aug. 8, 1988.
K011	Nonwastewater	June 8, 1989.	K045	All	Aug. 8, 1988.
K013	Wastewater	Aug. 8, 1990.	K046 (Nonreactive)	Nonwastewater	Aug. 8, 1988.
K013	Nonwastewater	June 8, 1989.	K046	All others	Aug. 8, 1990.
K014	Wastewater	Aug. 8, 1990.	K047	All	Aug. 8, 1988.
K014	Nonwastewater	June 8, 1989.	K048	Wastewater	Aug. 8, 1990.
K015	Wastewater	Aug. 8, 1990.	K048	Nonwastewater	Nov. 8, 1990.
K015	Nonwastewater	Aug. 8, 1990.	K049	Wastewater	Aug. 8, 1990.
K016	All	Aug. 8, 1988.	K049	Nonwastewater	Nov. 8, 1990.
K017	All	Aug. 8, 1990.	K050	Wastewater	Aug. 8, 1990.
K018	All	Aug. 8, 1988.	K050	Nonwastewater	Nov. 8, 1990.
K019	All	Aug. 8, 1988.	K051	Wastewater	Aug. 8, 1990.
K020	All	Aug. 8, 1988.	K051	Nonwastewater	Nov. 8, 1990.
K021	Wastewater	Aug. 8, 1990.	K052	Wastewater	Aug. 8, 1990.
K021	Nonwastewater	Aug. 8, 1988.	K052	Nonwastewater	Nov. 8, 1990.
K022	Wastewater	Aug. 8, 1990.	K060	Wastewater	Aug. 8, 1990.
K022	Nonwastewater	Aug. 8, 1988.	K060	Nonwastewater	Aug. 8, 1988.
			K061	Wastewater	Aug. 8,

K061	Nonwastewater	1990. June 30,	K109	All others	1994. Nov. 9,
K062	All	1992. Aug. 8,	K110	Mixed with radioactive wastes	1992. June 30,
K069 (Non- Calcium Sulfate)	Nonwastewater	1988. Aug. 8,	K110	All others	1994. Nov. 9,
K069	All others	1988.	K111	Mixed with radioactive wastes	1992. June 30,
K071	All	Aug. 8,	K111	All others	1994. Nov. 9,
K073	All	1990. Aug. 8,	K112	Mixed with radioactive wastes	1992. June 30,
K083	All	1990.	K112	All others	1994. Nov. 9,
K084	Wastewater	Aug. 8,	K113	All	1992. June 8,
K084	Nonwastewater	1990. May 8,	K114	All	1989. June 8,
K085	All	1992.	K115	All	1989. June 8,
K086	All	Aug. 8,	K116	All	1989. June 8,
(organics) ^b	All others	1988.	K117	Mixed with radioactive wastes	1989. June 30,
K086	All others	Aug. 8,	K117	All others	1994. Nov. 9,
K087	All	1988.	K118	Mixed with radioactive wastes	1992. June 30,
K088	All others	Aug. 8,	K118	All others	1994. Nov. 9,
K088	All others	Oct. 8,	K123	Mixed with radioactive wastes	1992. June 30,
K093	All	1997. Jan. 8,	K123	All others	1994. Nov. 9,
K094	All	1997.	K124	Mixed with radioactive wastes	1992. June 30,
K095	Wastewater	June 8,	K124	All others	1994. Nov. 9,
K095	Nonwastewater	1989.	K125	Mixed with radioactive wastes	1992. June 30,
K096	Wastewater	Aug. 8,	K125	All others	1994. Nov. 9,
K096	Nonwastewater	1990.	K126	Mixed with radioactive wastes	1992. June 30,
K097	All	June 8,	K126	All others	1994. Nov. 9,
K098	All	Aug. 8,	K131	Mixed with radioactive wastes	1992. June 30,
K099	All	1990.	K131	All others	1994. Nov. 9,
K100	Wastewater	Aug. 8,	K132	Mixed with radioactive wastes	1992. June 30,
K100	Nonwastewater	1990.	K132	All others	1994. Nov. 9,
K101	Wastewater	Aug. 8,	K136	Mixed with radioactive wastes	1992. June 30,
(organics)	Wastewater	1988.	K136	All others	1994. Nov. 9,
K101 (metals)	Wastewater	Aug. 8,	K141	Mixed with radioactive wastes	1992. Sep. 19,
K101	Nonwastewater	1990.	K141	All others	1996. Dec. 19,
(organics)	Nonwastewater	Aug. 8,	K142	Mixed with radioactive wastes	1994. Sep. 19,
K101 (metals)	Nonwastewater	1988.	K142	All others	1996. Dec. 19,
K102	Wastewater	May 8,	K143	Mixed with radioactive wastes	1994. Sep. 19,
(organics)	Wastewater	1992.	K143	All others	1996. Dec. 19,
K102 (metals)	Wastewater	Aug. 8,	K144	Mixed with radioactive wastes	1994. Sep. 19,
K102	Nonwastewater	1988.	K144	All others	1996. Dec. 19,
(organics)	Nonwastewater	Aug. 8,	K145	Mixed with radioactive wastes	1994. Sep. 19,
K102 (metals)	Nonwastewater	1990.	K145	All others	1996. Dec. 19,
K103	All	May 8,	K147	Mixed with radioactive wastes	1994. Sep. 19,
K104	All	1992.	K147	All others	1996. Dec. 19,
K105	All	June 30,	K148	Mixed with radioactive wastes	1994. Sep. 19,
K106	Wastewater	1994.	K148	All others	1996. Dec. 19,
K106	Nonwastewater	Nov. 9,	K149	Mixed with radioactive wastes	1994. Sep. 19,
K107	Mixed with radioactive wastes	1992.			1996. Sep. 19,
K107	All others	June 30,			1996. Sep. 19,
K108	Mixed with radioactive wastes	1994.			1996. Dec. 19,
K108	All others	Nov. 9,			1994. Sep. 19,
K109	Mixed with radioactive wastes	1992.			1996. Sep. 19,
		June 30,			1996.

K149	All others	Dec. 19, 1994.	P027	All	1990. Aug. 8,
K150	Mixed with radioactive wastes	Sep. 19, 1996.	P028	All	1990. Aug. 8,
K150	All others	Dec. 19, 1994.	P029	All	1990. June 8,
K151	Mixed with radioactive wastes	Sep. 19, 1996.	P030	All	1989. June 8,
K151	All others	Dec. 19, 1994.	P031	All	1989. Aug. 8,
K156	Mixed with radioactive wastes	Apr. 8, 1998.	P033	All	1990. Aug. 8,
K156	All others	July 8, 1996.	P034	All	1990. Aug. 8,
K157	Mixed with radioactive wastes	Apr. 8, 1998.	P036	Wastewater	1990. Aug. 8,
K157	All others	July 8, 1996.	P036	Nonwastewater	1990. May 8,
K158	Mixed with radioactive wastes	Apr. 8, 1998.	P037	All	1992. Aug. 8,
K158	All others	July 8, 1996.	P038	Wastewater	1990. Aug. 8,
K159	Mixed with radioactive wastes	Apr. 8, 1998.	P038	Nonwastewater	1990. May 8,
K159	All others	July 8, 1996.	P039	All	1992. June 8,
K160	Mixed with radioactive wastes	Apr. 8, 1998.	P040	All	1989. June 8,
K160	All others	July 8, 1996.	P041	All	1989. June 8,
K161	Mixed with radioactive wastes	Apr. 8, 1998.	P042	All	1989. Aug. 8,
K161	All others	July 8, 1996.	P043	All	1990. June 8,
P001	All	Aug. 8, 1990.	P044	All	1989. June 8,
P002	All	Aug. 8, 1990.	P045	All	1989. Aug. 8,
P003	All	Aug. 8, 1990.	P046	All	1990. Aug. 8,
P004	All	Aug. 8, 1990.	P047	All	1990. Aug. 8,
P005	All	Aug. 8, 1990.	P048	All	1990. Aug. 8,
P006	All	Aug. 8, 1990.	P049	All	1990. Aug. 8,
P007	All	Aug. 8, 1990.	P050	All	1990. Aug. 8,
P008	All	Aug. 8, 1990.	P051	All	1990. Aug. 8,
P009	All	Aug. 8, 1990.	P054	All	1990. Aug. 8,
P010	Wastewater	Aug. 8, 1990.	P056	All	1990. Aug. 8,
P010	Nonwastewater	May 8, 1992.	P057	All	1990. Aug. 8,
P011	Wastewater	Aug. 8, 1990.	P058	All	1990. Aug. 8,
P011	Nonwastewater	May 8, 1992.	P059	All	1990. Aug. 8,
P012	Wastewater	Aug. 8, 1990.	P060	All	1990. Aug. 8,
P012	Nonwastewater	May 8, 1992.	P062	All	1990. June 8,
P013 (barium)	Nonwastewater	Aug. 8, 1990.	P063	All	1989. June 8,
P013	All others	June 8, 1989.	P064	All	1989. Aug. 8,
P014	All	Aug. 8, 1990.	P065	Wastewater	1990. Aug. 8,
P015	All	Aug. 8, 1990.	P065	Nonwastewater	1990. May 8,
P016	All	Aug. 8, 1990.	P066	All	1992. Aug. 8,
P017	All	Aug. 8, 1990.	P067	All	1990. Aug. 8,
P018	All	Aug. 8, 1990.	P068	All	1990. Aug. 8,
P020	All	Aug. 8, 1990.	P069	All	1990. Aug. 8,
P021	All	June 8, 1989.	P070	All	1990. Aug. 8,
P022	All	Aug. 8, 1990.	P071	All	1990. June 8,
P023	All	Aug. 8, 1990.	P072	All	1989. Aug. 8,
P024	All	Aug. 8, 1990.	P073	All	1990. Aug. 8,
P026	All	Aug. 8,			1990.

P074	All	June 8, 1989.	P127	All others	1998.
P075	All	Aug. 8, 1990.	P128	Mixed with radioactive wastes	July 8, 1996.
P076	All	Aug. 8, 1990.	P128	All others	Apr. 8, 1998.
P077	All	Aug. 8, 1990.	P185	Mixed with radioactive wastes	July 8, 1996.
P078	All	Aug. 8, 1990.	P185	All others	Apr. 8, 1998.
P081	All	Aug. 8, 1990.	P188	Mixed with radioactive wastes	July 8, 1996.
P082	All	Aug. 8, 1990.	P188	All others	Apr. 8, 1998.
P084	All	Aug. 8, 1990.	P189	Mixed with radioactive wastes	July 8, 1996.
P085	All	June 8, 1989.	P189	All others	Apr. 8, 1998.
P087	All	May 8, 1992.	P190	Mixed with radioactive wastes	July 8, 1996.
P088	All	Aug. 8, 1990.	P190	All others	Apr. 8, 1998.
P089	All	June 8, 1989.	P191	Mixed with radioactive wastes	July 8, 1996.
P092	Wastewater	Aug. 8, 1990.	P191	All others	Apr. 8, 1998.
P092	Nonwastewater	May 8, 1992.	P192	Mixed with radioactive wastes	July 8, 1996.
P093	All	Aug. 8, 1990.	P192	All others	Apr. 8, 1998.
P094	All	June 8, 1989.	P192	All others	July 8, 1996.
P095	All	Aug. 8, 1990.	P194	Mixed with radioactive wastes	Apr. 8, 1998.
P096	All	Aug. 8, 1990.	P194	All others	July 8, 1996.
P097	All	June 8, 1989.	P196	Mixed with radioactive wastes	Apr. 8, 1998.
P098	All	June 8, 1989.	P196	All others	July 8, 1996.
P099 (silver)	Wastewater	Aug. 8, 1990.	P197	Mixed with radioactive wastes	Apr. 8, 1998.
P099	All others	June 8, 1989.	P197	All others	July 8, 1996.
P101	All	Aug. 8, 1990.	P198	Mixed with radioactive wastes	Apr. 8, 1998.
P102	All	Aug. 8, 1990.	P198	All others	July 8, 1996.
P103	All	Aug. 8, 1990.	P199	Mixed with radioactive wastes	Apr. 8, 1998.
P104 (silver)	Wastewater	Aug. 8, 1990.	P199	All others	July 8, 1996.
P104	All others	June 8, 1989.	P201	Mixed with radioactive wastes	Apr. 8, 1998.
P105	All	Aug. 8, 1990.	P201	All others	July 8, 1996.
P106	All	June 8, 1989.	P202	Mixed with radioactive wastes	Apr. 8, 1998.
P108	All	Aug. 8, 1990.	P202	All others	July 8, 1996.
P109	All	June 8, 1989.	P203	Mixed with radioactive wastes	Apr. 8, 1998.
P110	All	Aug. 8, 1990.	P203	All others	July 8, 1996.
P111	All	June 8, 1989.	P204	Mixed with radioactive wastes	Apr. 8, 1998.
P112	All	Aug. 8, 1990.	P204	All others	July 8, 1996.
P113	All	Aug. 8, 1990.	P205	Mixed with radioactive wastes	Apr. 8, 1998.
P114	All	Aug. 8, 1990.	P205	All others	July 8, 1996.
P115	All	Aug. 8, 1990.	U001	All	Aug. 8, 1990.
P116	All	Aug. 8, 1990.	U002	All	Aug. 8, 1990.
P118	All	Aug. 8, 1990.	U003	All	Aug. 8, 1990.
P119	All	Aug. 8, 1990.	U004	All	Aug. 8, 1990.
P120	All	Aug. 8, 1990.	U005	All	Aug. 8, 1990.
P121	All	June 8, 1989.	U006	All	Aug. 8, 1990.
P122	All	Aug. 8, 1990.	U007	All	Aug. 8, 1990.
P123	All	Aug. 8, 1990.	U008	All	Aug. 8, 1990.
P127	Mixed with radioactive wastes	Apr. 8,	U009	All	Aug. 8, 1990.

U010	A11	Aug. 8, 1990.	U058	A11	1990. June 8,
U011	A11	Aug. 8, 1990.	U059	A11	1989. Aug. 8,
U012	A11	Aug. 8, 1990.	U060	A11	1990. Aug. 8,
U014	A11	Aug. 8, 1990.	U061	A11	1990. Aug. 8,
U015	A11	Aug. 8, 1990.	U062	A11	1990. Aug. 8,
U016	A11	Aug. 8, 1990.	U063	A11	1990. Aug. 8,
U017	A11	Aug. 8, 1990.	U064	A11	1990. Aug. 8,
U018	A11	Aug. 8, 1990.	U066	A11	1990. Aug. 8,
U019	A11	Aug. 8, 1990.	U067	A11	1990. Aug. 8,
U020	A11	Aug. 8, 1990.	U068	A11	1990. Aug. 8,
U021	A11	Aug. 8, 1990.	U069	A11	1990. June 30,
U022	A11	Aug. 8, 1990.	U070	A11	1992. Aug. 8,
U023	A11	Aug. 8, 1990.	U071	A11	1990. Aug. 8,
U024	A11	Aug. 8, 1990.	U072	A11	1990. Aug. 8,
U025	A11	Aug. 8, 1990.	U073	A11	1990. Aug. 8,
U026	A11	Aug. 8, 1990.	U074	A11	1990. Aug. 8,
U027	A11	Aug. 8, 1990.	U075	A11	1990. Aug. 8,
U028	A11	June 8, 1989.	U076	A11	1990. Aug. 8,
U029	A11	Aug. 8, 1990.	U077	A11	1990. Aug. 8,
U030	A11	Aug. 8, 1990.	U078	A11	1990. Aug. 8,
U031	A11	Aug. 8, 1990.	U079	A11	1990. Aug. 8,
U032	A11	Aug. 8, 1990.	U080	A11	1990. Aug. 8,
U033	A11	Aug. 8, 1990.	U081	A11	1990. Aug. 8,
U034	A11	Aug. 8, 1990.	U082	A11	1990. Aug. 8,
U035	A11	Aug. 8, 1990.	U083	A11	1990. Aug. 8,
U036	A11	Aug. 8, 1990.	U084	A11	1990. Aug. 8,
U037	A11	Aug. 8, 1990.	U085	A11	1990. Aug. 8,
U038	A11	Aug. 8, 1990.	U086	A11	1990. Aug. 8,
U039	A11	Aug. 8, 1990.	U087	A11	1990. June 8,
U041	A11	Aug. 8, 1990.	U088	A11	1989. June 8,
U042	A11	Aug. 8, 1990.	U089	A11	1989. Aug. 8,
U043	A11	Aug. 8, 1990.	U090	A11	1990. Aug. 8,
U044	A11	Aug. 8, 1990.	U091	A11	1990. Aug. 8,
U045	A11	Aug. 8, 1990.	U092	A11	1990. Aug. 8,
U046	A11	Aug. 8, 1990.	U093	A11	1990. Aug. 8,
U047	A11	Aug. 8, 1990.	U094	A11	1990. Aug. 8,
U048	A11	Aug. 8, 1990.	U095	A11	1990. Aug. 8,
U049	A11	Aug. 8, 1990.	U096	A11	1990. Aug. 8,
U050	A11	Aug. 8, 1990.	U097	A11	1990. Aug. 8,
U051	A11	Aug. 8, 1990.	U098	A11	1990. Aug. 8,
U052	A11	Aug. 8, 1990.	U099	A11	1990. Aug. 8,
U053	A11	Aug. 8, 1990.	U101	A11	1990. Aug. 8,
U055	A11	Aug. 8, 1990.	U102	A11	1990. June 8,
U056	A11	Aug. 8, 1990.	U103	A11	1989. Aug. 8,
U057	A11	Aug. 8,			1990.

U105	A11	Aug. 8, 1990.	U150	A11	1990. Aug. 8,
U106	A11	Aug. 8, 1990.	U151	Wastewater	1990. Aug. 8,
U107	A11	June 8, 1989.	U151	Nonwastewater	1990. May 8,
U108	A11	Aug. 8, 1990.	U152	A11	1992.
U109	A11	Aug. 8, 1990.	U153	A11	Aug. 8,
U110	A11	Aug. 8, 1990.	U154	A11	1990. Aug. 8,
U111	A11	Aug. 8, 1990.	U155	A11	1990. Aug. 8,
U112	A11	Aug. 8, 1990.	U156	A11	1990. Aug. 8,
U113	A11	Aug. 8, 1990.	U157	A11	1990. Aug. 8,
U114	A11	Aug. 8, 1990.	U158	A11	1990. Aug. 8,
U115	A11	Aug. 8, 1990.	U159	A11	1990. Aug. 8,
U116	A11	Aug. 8, 1990.	U160	A11	1990. Aug. 8,
U117	A11	Aug. 8, 1990.	U161	A11	1990. Aug. 8,
U118	A11	Aug. 8, 1990.	U162	A11	1990. Aug. 8,
U119	A11	Aug. 8, 1990.	U163	A11	1990. Aug. 8,
U120	A11	Aug. 8, 1990.	U164	A11	1990. Aug. 8,
U121	A11	Aug. 8, 1990.	U165	A11	1990. Aug. 8,
U122	A11	Aug. 8, 1990.	U166	A11	1990. Aug. 8,
U123	A11	Aug. 8, 1990.	U167	A11	1990. Aug. 8,
U124	A11	Aug. 8, 1990.	U168	A11	1990. Aug. 8,
U125	A11	Aug. 8, 1990.	U169	A11	1990. Aug. 8,
U126	A11	Aug. 8, 1990.	U170	A11	1990. Aug. 8,
U127	A11	Aug. 8, 1990.	U171	A11	1990. Aug. 8,
U128	A11	Aug. 8, 1990.	U172	A11	1990. Aug. 8,
U129	A11	Aug. 8, 1990.	U173	A11	1990. Aug. 8,
U130	A11	Aug. 8, 1990.	U174	A11	1990. Aug. 8,
U131	A11	Aug. 8, 1990.	U176	A11	1990. Aug. 8,
U132	A11	Aug. 8, 1990.	U177	A11	1990. Aug. 8,
U133	A11	Aug. 8, 1990.	U178	A11	1990. Aug. 8,
U134	A11	Aug. 8, 1990.	U179	A11	1990. Aug. 8,
U135	A11	Aug. 8, 1990.	U180	A11	1990. Aug. 8,
U136	Wastewater	Aug. 8, 1990.	U181	A11	1990. Aug. 8,
U136	Nonwastewater	May 8, 1992.	U182	A11	1990. Aug. 8,
U137	A11	Aug. 8, 1990.	U183	A11	1990. Aug. 8,
U138	A11	Aug. 8, 1990.	U184	A11	1990. Aug. 8,
U140	A11	Aug. 8, 1990.	U185	A11	1990. Aug. 8,
U141	A11	Aug. 8, 1990.	U186	A11	1990. Aug. 8,
U142	A11	Aug. 8, 1990.	U187	A11	1990. Aug. 8,
U143	A11	Aug. 8, 1990.	U188	A11	1990. Aug. 8,
U144	A11	Aug. 8, 1990.	U189	A11	1990. Aug. 8,
U145	A11	Aug. 8, 1990.	U190	A11	1990. June 8,
U146	A11	Aug. 8, 1990.	U191	A11	1989. Aug. 8,
U147	A11	Aug. 8, 1990.	U192	A11	1990. Aug. 8,
U148	A11	Aug. 8, 1990.	U193	A11	1990. Aug. 8,
U149	A11	Aug. 8,			1990.

U194	A11	June 8, 1989.	U277	All others	1998.
U196	A11	Aug. 8, 1990.	U278	Mixed with radioactive wastes	July 8, 1996.
U197	A11	Aug. 8, 1990.	U278	All others	Apr. 8, 1998.
U200	A11	Aug. 8, 1990.	U279	Mixed with radioactive wastes	July 8, 1996.
U201	A11	Aug. 8, 1990.	U279	All others	Apr. 8, 1998.
U203	A11	Aug. 8, 1990.	U280	Mixed with radioactive wastes	July 8, 1996.
U204	A11	Aug. 8, 1990.	U280	All others	Apr. 8, 1998.
U205	A11	Aug. 8, 1990.	U328	Mixed with radioactive wastes	July 8, 1996.
U206	A11	Aug. 8, 1990.	U328	All others	June 30, 1994.
U207	A11	Aug. 8, 1990.	U353	Mixed with radioactive wastes	Nov. 9, 1992.
U208	A11	Aug. 8, 1990.	U353	All others	June 30, 1994.
U209	A11	Aug. 8, 1990.	U359	Mixed with radioactive wastes	Nov. 9, 1992.
U210	A11	Aug. 8, 1990.	U359	All others	June 30, 1994.
U211	A11	Aug. 8, 1990.	U364	Mixed with radioactive wastes	Nov. 9, 1992.
U213	A11	Aug. 8, 1990.	U364	All others	Apr. 8, 1998.
U214	A11	Aug. 8, 1990.	U365	Mixed with radioactive wastes	July 8, 1996.
U215	A11	Aug. 8, 1990.	U365	All others	Apr. 8, 1998.
U216	A11	Aug. 8, 1990.	U366	Mixed with radioactive wastes	July 8, 1996.
U217	A11	Aug. 8, 1990.	U366	All others	Apr. 8, 1998.
U218	A11	Aug. 8, 1990.	U367	Mixed with radioactive wastes	July 8, 1996.
U219	A11	Aug. 8, 1990.	U367	All others	Apr. 8, 1998.
U220	A11	Aug. 8, 1990.	U372	Mixed with radioactive wastes	July 8, 1996.
U221	A11	June 8, 1989.	U372	All others	Apr. 8, 1998.
U222	A11	Aug. 8, 1990.	U373	Mixed with radioactive wastes	July 8, 1996.
U223	A11	June 8, 1989.	U373	All others	Apr. 8, 1998.
U225	A11	Aug. 8, 1990.	U375	Mixed with radioactive wastes	July 8, 1996.
U226	A11	Aug. 8, 1990.	U375	All others	Apr. 8, 1998.
U227	A11	Aug. 8, 1990.	U376	Mixed with radioactive wastes	July 8, 1996.
U228	A11	Aug. 8, 1990.	U376	All others	Apr. 8, 1998.
U234	A11	Aug. 8, 1990.	U377	Mixed with radioactive wastes	July 8, 1996.
U235	A11	June 8, 1989.	U377	All others	Apr. 8, 1998.
U236	A11	Aug. 8, 1990.	U378	Mixed with radioactive wastes	July 8, 1996.
U237	A11	Aug. 8, 1990.	U378	All others	Apr. 8, 1998.
U238	A11	Aug. 8, 1990.	U379	Mixed with radioactive wastes	July 8, 1996.
U239	A11	Aug. 8, 1990.	U379	All others	Apr. 8, 1998.
U240	A11	Aug. 8, 1990.	U381	Mixed with radioactive wastes	July 8, 1996.
U243	A11	Aug. 8, 1990.	U381	All others	Apr. 8, 1998.
U244	A11	Aug. 8, 1990.	U382	Mixed with radioactive wastes	July 8, 1996.
U246	A11	Aug. 8, 1990.	U382	All others	Apr. 8, 1998.
U247	A11	Aug. 8, 1990.	U383	Mixed with radioactive wastes	July 8, 1996.
U248	A11	Aug. 8, 1990.	U383	All others	Apr. 8, 1998.
U249	A11	Aug. 8, 1990.	U384	Mixed with radioactive wastes	July 8, 1996.
U271	Mixed with radioactive wastes	Apr. 8, 1998.	U384	All others	Apr. 8, 1998.
U271	All others	July 8, 1996.	U384	All others	July 8, 1996.
U277	Mixed with radioactive wastes	Apr. 8,	U385	Mixed with radioactive wastes	Apr. 8, 1998.

U385	All others	July 8, 1996.
U386	Mixed with radioactive wastes	Apr. 8, 1998.
U386	All others	July 8, 1996.
U387	Mixed with radioactive wastes	Apr. 8, 1998.
U387	All others	July 8, 1996.
U389	Mixed with radioactive wastes	Apr. 8, 1998.
U389	All others	July 8, 1996.
U390	Mixed with radioactive wastes	Apr. 8, 1998.
U390	All others	July 8, 1996.
U391	Mixed with radioactive wastes	Apr. 8, 1998.
U391	All others	July 8, 1996.
U392	Mixed with radioactive wastes	Apr. 8, 1998.
U392	All others	July 8, 1996.
U393	Mixed with radioactive wastes	Apr. 8, 1998.
U393	All others	July 8, 1996.
U394	Mixed with radioactive wastes	Apr. 8, 1998.
U394	All others	July 8, 1996.
U395	Mixed with radioactive wastes	Apr. 8, 1998.
U395	All others	July 8, 1996.
U396	Mixed with radioactive wastes	Apr. 8, 1998.
U396	All others	July 8, 1996.
U400	Mixed with radioactive wastes	Apr. 8, 1998.
U400	All others	July 8, 1996.
U401	Mixed with radioactive wastes	Apr. 8, 1998.
U401	All others	July 8, 1996.
U402	Mixed with radioactive wastes	Apr. 8, 1998.
U402	All others	July 8, 1996.
U403	Mixed with radioactive wastes	Apr. 8, 1998.
U403	All others	July 8, 1996.
U404	Mixed with radioactive wastes	Apr. 8, 1998.
U404	All others	July 8, 1996.
U407	Mixed with radioactive wastes	Apr. 8, 1998.
U407	All others	July 8, 1996.
U409	Mixed with radioactive wastes	Apr. 8, 1998.
U409	All others	July 8, 1996.
U410	Mixed with radioactive wastes	Apr. 8, 1998.
U410	All others	July 8, 1996.
U411	Mixed with radioactive wastes	Apr. 8, 1998.
U411	All others	July 8, 1996.

was August 8, 1990.
 *The standards for selected reactive wastes was revised in the Phase III Final Rule, 61 FR 15566, Apr. 8, 1996; the original effective date was August 8, 1990.

Table 2

Summary of Effective Dates of Land Disposal Restrictions for Contaminated Soil and Debris (CSD)	
Restricted hazardous waste in CSD	Effective date
1. Solvent-(F001-F005) and dioxin-(F020-F023 and F026-F028) containing soil and debris from CERCLA response or RCRA corrective actions	Nov. 8, 1990.
2. Soil and debris not from CERCLA response or RCRA corrective actions contaminated with less than 1% total solvents (F001-F005) or dioxins (F020-F023 and F026-F028)	Nov. 8, 1988.
3. All soil and debris contaminated with First Third wastes for which treatment standards are based on incineration	Aug. 8, 1990.
4. All soil and debris contaminated with Second Third wastes for which treatment standards are based on incineration	June 8, 1991.
5. All soil and debris contaminated with Third Third wastes or, First or Second Third "soft hammer" wastes which had treatment standards promulgated in the Third Third rule, for which treatment standards are based on incineration, vitrification, or mercury retorting, acid leaching followed by chemical precipitation, or thermal recovery of metals; as well as all inorganic solids debris contaminated with D004-D011 wastes, and all soil and debris contaminated with mixed RCRA/radioactive wastes	May 8, 1992.
6. Soil and debris contaminated with D012-D043, K141-K145, and K147-151 wastes	Dec. 19, 1994.
7. Debris (only) contaminated with F037, F038, K107-K112, K117, K118, K123-K126, K131, K132, K136, U328, U353, U359	Dec. 19, 1994.
8. Soil and debris contaminated with K156-K161, P127, P128, P188-P192, P194, P196-P199, P201-P205, U271, U277-U280, U364-U367, U372,U373, U375-U379, U381-U387, U389-U396, U400-U404, U407, and U409-U411 wastes	July 8, 1996.
9. Soil and debris contaminated with K088 wastes	Oct. 8, 1997.
10. Soil and debris contaminated with radioactive wastes mixed with K088, K156-K161, P127, P128, P188-P192, P194, P196-P199, P201-P205, U271, U277-U280, U364-U367, U372, U373, U375-U379, U381-U387, U389-U396, U400-U404, U407, and U409-U411 wastes	April 8, 1998.
11. Soil and debris contaminated with F032, F034, and F035	May 12, 1997.
12. Soil and debris contaminated with newly identified D004-D011 toxicity characteristic wastes and mineral processing wastes.	Aug. 24, 1998.
13. Soil and debris contaminated with mixed radioactive newly identified D004-D011 characteristic wastes and mineral processing wastes.	May 26, 2000.

Note: Appendix VII is provided for the convenience of the reader.

R315-268-51. Appendix VIII to Rule R315-268 - LDR Effective Dates of Injected Prohibited Hazardous Wastes.

Table

National Capacity LDR Variances for UIC Wastes^a

^aThis table does not include mixed radioactive wastes, from the First, Second, and Third Third rules, which received national capacity variance until May 8, 1992. This table also does not include contaminated soil and debris wastes.

^bThe standard was revised in the Third Third Final Rule, 55 FR 22520, June 1, 1990.

^cThe standard was revised in the Third Third Emergency Rule, 58 FR 29860, May 24, 1993; the original effective date was August 8, 1990.

^dThe standard was revised in the Phase II Final Rule, 59 FR 47982, Sept. 19, 1994; the original effective date

Waste code	Waste category	Effective date			
			D041	wastes	1998.
				All, including mixed radioactive wastes	Apr. 8, 1998.
F001-F005	All spent F001-F005 solvent containing less than 1 percent total F001-F005 solvent constituents	Aug. 8, 1990.	D042	All, including mixed radioactive wastes	Apr. 8, 1998.
			D043	All, including mixed radioactive wastes	Apr. 8, 1998.
D001 (except High TOC Ignitable Liquids Subcategory) ^c	All	Feb. 10, 1994.	F007	All	Apr. 8, 1998.
					June 8, 1991.
D001 (High TOC Ignitable Characteristic Liquids Subcategory) D002 ^b	Nonwastewater	Sept. 19, 1995.	F032	All, including mixed radioactive wastes	May 12, 1999.
	All		F034	All, including mixed radioactive wastes	May 12, 1999.
D002 ^c	All	May 8, 1992.	F035	All, including mixed radioactive wastes	May 12, 1999.
			F037	All	Nov. 8, 1992.
D003 (cyanides)	All	Feb. 10, 1994.	F038	All	Nov. 8, 1992.
D003 (sulfides)	All	May 8, 1992.	F039	Wastewater	May 8, 1992.
D003 (explosives, reactives)	All	May 8, 1992.	K009	Wastewater	June 8, 1991.
D007	All	May 8, 1992.	K011	Nonwastewater	June 8, 1991.
D009	Nonwastewater	May 8, 1992.	K011	Wastewater	May 8, 1992.
D012	All	Sept. 19, 1995.	K013	Nonwastewater	June 8, 1991.
D013	All	Sept. 19, 1995.	K013	Wastewater	May 8, 1992.
D014	All	Sept. 19, 1995.	K014	All	May 8, 1992.
D015	All	Sept. 19, 1995.	K016 (dilute)	All	June 8, 1991.
D016	All	Sept. 19, 1995.	K049	All	Aug. 8, 1990.
D017	All	Sept. 19, 1995.	K050	All	Aug. 8, 1990.
D018	All, including mixed with radioactive wastes	Apr. 8, 1998.	K051	All	Aug. 8, 1990.
D019	All, including mixed with radioactive wastes	Apr. 8, 1998.	K052	All	Aug. 8, 1990.
D020	All, including mixed with radioactive wastes	Apr. 8, 1998.	K062	All	Aug. 8, 1990.
D021	All, including mixed with radioactive wastes	Apr. 8, 1998.	K071	All	Aug. 8, 1990.
D022	All, including mixed with radioactive wastes	Apr. 8, 1998.	K088	All	Jan. 8, 1997.
D023	All, including mixed radioactive wastes	Apr. 8, 1998.	K104	All	Aug. 8, 1990.
D024	All, including mixed radioactive wastes	Apr. 8, 1998.	K107	All	Nov. 8, 1992.
D025	All, including mixed radioactive wastes	Apr. 8, 1998.	K108	All	Nov. 9, 1992.
D026	All, including mixed radioactive wastes	Apr. 8, 1998.	K109	All	Nov. 9, 1992.
D027	All, including mixed radioactive wastes	Apr. 8, 1998.	K110	All	Nov. 9, 1992.
D028	All, including mixed radioactive wastes	Apr. 8, 1998.	K111	All	Nov. 9, 1992.
D029	All, including mixed radioactive wastes	Apr. 8, 1998.	K112	All	Nov. 9, 1992.
D030	All, including mixed radioactive wastes	Apr. 8, 1998.	K117	All	June 30, 1995.
D031	All, including mixed radioactive wastes	Apr. 8, 1998.	K118	All	June 30, 1995.
D032	All, including mixed radioactive wastes	Apr. 8, 1998.	K123	All	Nov. 9, 1992.
D033	All, including mixed radioactive wastes	Apr. 8, 1998.	K124	All	Nov. 9, 1992.
D034	All, including mixed radioactive wastes	Apr. 8, 1998.	K125	All	Nov. 9, 1992.
D035	All, including mixed radioactive wastes	Apr. 8, 1998.	K126	All	Nov. 9, 1992.
D036	All, including mixed radioactive wastes	Apr. 8, 1998.	K131	All	June 30, 1995.
D037	All, including mixed radioactive wastes	Apr. 8, 1998.	K132	All	June 30, 1995.
D038	All, including mixed radioactive wastes	Apr. 8, 1998.	K136	All	Nov. 9, 1992.
D039	All, including mixed radioactive wastes	Apr. 8, 1998.	K141	All	Dec. 19, 1994.
D040	All, including mixed radioactive	Apr. 8,	K142	All	Dec. 19, 1994.
			K143	All	Dec. 19, 1994.
			K144	All	Dec. 19, 1994.

K145	A11	Dec. 19, 1994.	U372	A11	1996.
K147	A11	Dec. 19, 1994.	U373	A11	July 8, 1996.
K148	A11	Dec. 19, 1994.	U375	A11	July 8, 1996.
K149	A11	Dec. 19, 1994.	U376	A11	July 8, 1996.
K150	A11	Dec. 19, 1994.	U377	A11	July 8, 1996.
K151	A11	Dec. 19, 1994.	U378	A11	July 8, 1996.
K156	A11	July 8, 1996.	U379	A11	July 8, 1996.
K157	A11	July 8, 1996.	U381	A11	July 8, 1996.
K158	A11	July 8, 1996.	U382	A11	July 8, 1996.
K159	A11	July 8, 1996.	U383	A11	July 8, 1996.
K160	A11	July 8, 1996.	U384	A11	July 8, 1996.
K161	A11	July 8, 1996.	U385	A11	July 8, 1996.
NA	Newly identified mineral processing wastes from titanium dioxide production and mixed radioactive/newly identified D004-D011 characteristic wastes and mineral processing wastes.	May 26, 2000.	U386	A11	July 8, 1996.
			U387	A11	July 8, 1996.
P127	A11	July 8, 1996.	U389	A11	July 8, 1996.
P128	A11	July 8, 1996.	U390	A11	July 8, 1996.
P185	A11	July 8, 1996.	U391	A11	July 8, 1996.
P188	A11	July 8, 1996.	U392	A11	July 8, 1996.
P189	A11	July 8, 1996.	U395	A11	July 8, 1996.
P190	A11	July 8, 1996.	U396	A11	July 8, 1996.
P191	A11	July 8, 1996.	U400	A11	July 8, 1996.
P192	A11	July 8, 1996.	U401	A11	July 8, 1996.
P194	A11	July 8, 1996.	U402	A11	July 8, 1996.
P196	A11	July 8, 1996.	U403	A11	July 8, 1996.
P197	A11	July 8, 1996.	U404	A11	July 8, 1996.
P198	A11	July 8, 1996.	U407	A11	July 8, 1996.
P199	A11	July 8, 1996.	U409	A11	July 8, 1996.
P199	A11	July 8, 1996.	U410	A11	July 8, 1996.
P201	A11	July 8, 1996.	U411	A11	July 8, 1996.
P202	A11	July 8, 1996.			July 8, 1996.
P203	A11	July 8, 1996.			^a Wastes that are deep well disposed on-site receive a six-month variance, with restrictions effective in November 1990.
P204	A11	July 8, 1996.			^b Deepwell injected D002 liquids with a pH less than 2 shall meet the California List treatment standards on August 8, 1990.
P205	A11	July 8, 1996.			^c Managed in systems defined in 40 CFR 144.6(e) and 144.6(e) as Class V injection wells, that do not engage in CNA-equivalent treatment before injection.
U271	A11	July 8, 1996.			Note: This table is provided for the convenience of the reader.
U277	A11	July 8, 1996.			
U278	A11	July 8, 1996.			
U279	A11	July 8, 1996.			
U280	A11	July 8, 1996.			
U328	A11	Nov. 9, 1992.			
U353	A11	Nov. 9, 1992.			
U359	A11	Nov. 9, 1992.			
U364	A11	July 8, 1996.			
U365	A11	July 8, 1996.			
U366	A11	July 8, 1996.			
U367	A11	July 8,			

R315-268-56. Appendix IX to Rule R315-268 - Extraction Procedure (EP) Toxicity Test Method and Structural Integrity Test (Method 1310B).

Note: The EP (Method 1310B) is published in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference in Section R315-260-11.

R315-268-57. Appendix XI to Rule R315-268-Metal Bearing Wastes Prohibited from Dilution in a Combustion Unit According to Subsection R315-268-3(c).

Metal Bearing Wastes Prohibited From Dilution in a Combustion Unit According to Subsection R315-268-3(c)¹

Waste code	Waste description
D004	Toxicity Characteristic for Arsenic.
D005	Toxicity Characteristic for Barium.
D006	Toxicity Characteristic for Cadmium.
D007	Toxicity Characteristic for Chromium.
D008	Toxicity Characteristic for Lead.
D009	Toxicity Characteristic for Mercury.
D010	Toxicity Characteristic for Selenium.
D011	Toxicity Characteristic for Silver.
F006	Wastewater treatment sludges from electroplating operations except from the following processes: (1) sulfuric acid anodizing of aluminum; (2) tin plating carbon steel; (3) zinc plating (segregated basis) on carbon steel; (4) aluminum or zinc-plating on carbon steel; (5) cleaning/stripping associated with tin, zinc and aluminum plating on carbon steel; and (6) chemical etching and milling of aluminum.
F007	Spent cyanide plating bath solutions from electroplating operations.
F008	Plating bath residues from the bottom of plating baths from electroplating operations where cyanides are used in the process.
F009	Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process.
F010	Quenching bath residues from oil baths from metal treating operations where cyanides are used in the process.
F011	Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations.
F012	Quenching waste water treatment sludges from metal heat treating operations where cyanides are used in the process.
F019	Wastewater treatment sludges from the chemical conversion coating of aluminum except from zirconium phosphating in aluminum car washing when such phosphating is an exclusive conversion coating process.
K002	Wastewater treatment sludge from the production of chrome yellow and orange pigments.
K003	Wastewater treatment sludge from the production of molybdate orange pigments.
K004	Wastewater treatment sludge from the production of zinc yellow pigments.
K005	Wastewater treatment sludge from the production of chrome green pigments.
K006	Wastewater treatment sludge from the production of chrome oxide green pigments, anhydrous and hydrated.
K007	Wastewater treatment sludge from the production of iron blue pigments.
K008	Oven residue from the production of chrome oxide green pigments.
K061	Emission control dust/sludge from the primary production of steel in electric furnaces.
K069	Emission control dust/sludge from secondary lead smelting.
K071	Brine purification muds from the mercury cell processes in chlorine production, where separately prepurified brine is not used.
K100	Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting.
K106	Sludges from the mercury cell processes for making chlorine.
P010	Arsenic acid H_3AsO_4
P011	Arsenic oxide As_2O_5
P012	Arsenic trioxide
P013	Barium cyanide
P015	Beryllium
P029	Copper cyanide $Cu(CN)$
P074	Nickel cyanide $Ni(CN)_2$
P087	Osmium tetroxide
P099	Potassium silver cyanide
P104	Silver cyanide
P113	Thallic oxide
P114	Thallium (I) selenite
P115	Thallium (I) sulfate
P119	Ammonium vanadate
P120	Vanadium oxide V_2O_5
P121	Zinc cyanide.
U032	Calcium chromate.
U145	Lead phosphate.
U151	Mercury.
U204	Selenious acid. U205 Selenium disulfide.
U216	Thallium (I) chloride.
U217	Thallium (I) nitrate.

¹A combustion unit is defined as any thermal technology subject to Sections R315-264-340 through 351; 40 CFR 265.340 through 352, which are adopted by reference; and/or Sections R315-266-100 through 112.

**KEY: hazardous waste, land disposal restrictions
August 31, 2017**

19-6-105

19-6-106

R315. Environmental Quality, Waste Management and Radiation Control, Waste Management.**R315-270. Hazardous Waste Permit Program.****R315-270-1. Hazardous Waste Permit Program -- Purpose and Scope of These Rules.**

(a) No person shall own, construct, modify, or operate any facility for the purpose of treating, storing, or disposing of hazardous waste without first submitting, and receiving the approval of the Director for, a hazardous waste permit for that facility. However, any person owning or operating a facility on or before November 19, 1980, who has given timely notification as required by section 3010 of the Resource Conservation and Recovery Act (RCRA) of 1976, 42 U.S.C., section 6921, et seq., and who has submitted a proposed hazardous waste permit as required by Section R315-270-1 and Section 19-6-108 for that facility, may continue to operate that facility without violating Section R315-270-1 until such time as the permit is approved or disapproved pursuant to Section R315-270-1.

(b)(1) The Director shall review each proposed hazardous waste permit application to determine whether the application will be in accord with the provisions of Rules R315-260 through 266, 268, 270 and 273, and Section 19-6-108 and, on that basis, shall approve or disapprove the application within the applicable time period specified in Section 19-6-108. If, after the receipt of plans, specifications, or other information required under Rule R315-270 and Section 19-6-108 and within the applicable time period of Section 19-6-108, the Director determines that the proposed construction, installation or establishment or any part of it will not be in accord with the requirements of Rule R315-270 or other applicable rules, he shall issue an order prohibiting the construction, installation or establishment of the proposal in whole or in part. The date of submission shall be deemed to be the date of all required information is provided to the Director as required by Rule R315-270.

(2) Any permit application which does not meet the requirements of Rules 315-260 through 266, 268 270 and 273 shall be disapproved within the applicable time period specified in Section 19-6-108. If within the applicable time period specified in Section 19-6-108 the Director fails to approve or disapprove the permit application or to request the submission of any additional information or modification to the application, the application shall not be deemed approved but the applicant may petition the Director for a decision or seek judicial relief requiring a decision of approval or disapproval.

(3) An application for approval of a hazardous waste permit consists of two parts, part A and part B. For an existing facility, the requirement is satisfied by submitting only part A of the application until the date the Director sets for each individual facility for submitting part B of the application, which date shall be in no case less than six months after the Director gives notice to a particular facility that it shall submit part B of the application.

(c) Scope of the hazardous waste permit requirement. Section 19-6-108 requires a permit for the "treatment," "storage," and "disposal" of any "hazardous waste" as identified or listed in Rule R315-261. The terms "treatment," "storage," "disposal," and "hazardous waste" are defined in Section R315-270-2. Owners and operators of hazardous waste management units shall have permits during the active life, including the closure period, of the unit. Owners and operators of surface impoundments, landfills, land treatment units, and waste pile units that received waste after July 26, 1982, or that certified closure, according to 40 CFR 265.115, which is adopted by reference, after January 26, 1983, shall have post-closure permits, unless they demonstrate closure by removal or decontamination as provided under Subsections R315-270-1(c)(5) and (6), or obtain an enforceable document in lieu of a post-closure permit, as provided under Subsection R315-270-1(c)(7). If a post-closure permit is required, the permit shall

address applicable Rule R315-264 groundwater monitoring, unsaturated zone monitoring, corrective action, and post-closure care requirements. The denial of a permit for the active life of a hazardous waste management facility or unit does not affect the requirement to obtain a post-closure permit under Section R315-270-1.

(1) Specific inclusions. Owners and operators of certain facilities require hazardous waste permits as well as permits under other programs for certain aspects of the facility operation. Hazardous waste permits are required for:

(i) Injection wells that dispose of hazardous waste, and associated surface facilities that treat, store or dispose of hazardous waste. However, the owner and operator with a Utah or Federal UIC permit, shall be deemed to have a "permit by rule" for the injection well itself if they comply with the requirements of Subsection R315-270-60(b).

(ii) Treatment, storage, or disposal of hazardous waste at facilities requiring an NPDES permit. However, the owner and operator of a publicly owned treatment works receiving hazardous waste shall be deemed to have a "permit by rule" for that waste if they comply with the requirements of Section R315-270-60(c).

(2) Specific exclusions and exemptions. The following persons are among those who are not required to obtain a hazardous waste permit:

(i) Generators who accumulate hazardous waste on-site in compliance with all of the conditions for exemption provided in Sections R315-262-14, R315-262-15, R315-262-16, and R315-262-17.

(ii) Farmers who dispose of hazardous waste pesticides from their own use as provided in Section R315-262-70;

(iii) Persons who own or operate facilities solely for the treatment, storage or disposal of hazardous waste excluded from regulations under Rule R315-270 by Section R315-261-4 or Section R315-262-14, very small quantity generator exemption.

(iv) Owners or operators of totally enclosed treatment facilities as defined in Section R315-260-10.

(v) Owners and operators of elementary neutralization units or wastewater treatment units as defined in Section R315-260-10.

(vi) Transporters storing manifested shipments of hazardous waste in containers meeting the requirements of Section R315-262-30 at a transfer facility for a period of ten days or less.

(vii) Persons adding absorbent material to waste in a container, as defined in Section R315-260-10, and persons adding waste to absorbent material in a container, provided that these actions occur at the time waste is first placed in the container; and Subsection R315-264-17(b) and Sections R315-264-171, and 172 are complied with.

(viii) Universal waste handlers and universal waste transporters, as defined in Section R315-260-10, managing the wastes listed below. These handlers are subject to regulation under Rule R315-273.

(A) Batteries as described in Section R315-273-2;

(B) Pesticides as described in Section R315-273-3;

(C) Mercury-containing equipment as described in Section R315-273-4; and

(D) Lamps as described in Section R315-273-5.

(3) Further exclusions.

(i) A person is not required to obtain a permit for treatment or containment activities taken during immediate response to any of the following situations:

(A) A discharge of a hazardous waste;

(B) An imminent and substantial threat of a discharge of hazardous waste;

(C) A discharge of a material which, when discharged, becomes a hazardous waste.

(ii) Any person who continues or initiates hazardous waste

treatment or containment activities after the immediate response is over is subject to all applicable requirements of Rule R315-270 for those activities.

(iii) In the case of emergency responses involving military munitions, the responding military emergency response specialist's organizational unit shall retain records for three years identifying the dates of the response, the responsible persons responding, the type and description of material addressed, and its disposition.

(4) Permits for less than an entire facility. The Director may issue or deny a permit for one or more units at a facility without simultaneously issuing or denying a permit to all of the units at the facility. The interim status of any unit for which a permit has not been issued or denied is not affected by the issuance or denial of a permit to any other unit at the facility.

(5) Closure by removal. Owners/operators of surface impoundments, land treatment units, and waste piles closing by removal or decontamination under Rule R315-265 standards shall obtain a post-closure permit unless they can demonstrate to the Director that the closure met the standards for closure by removal or decontamination in Section R315-264-228, Subsection R315-264-280(e), or Section R315-264-258, respectively. The demonstration may be made in the following ways:

(i) If the owner/operator has submitted a part B application for a post-closure permit, the owner/operator may request a determination, based on information contained in the application, that Rule R315-264 closure by removal standards were met. If the Director believes that Rule R315-264 standards were met, The Director shall notify the public of this proposed decision, allow for public comment, and reach a final determination according to the procedures in Subsection R315-270-1(c)(6).

(ii) If the owner/operator has not submitted a part B application for a post-closure permit, the owner/operator may petition the Director for a determination that a post-closure permit is not required because the closure met the applicable Rule R315-264 closure standards.

(A) The petition shall include data demonstrating that closure by removal or decontamination standards of Rule R315-264 were met.

(B) The Director shall approve or deny the petition according to the procedures outlined in Subsection R315-270-1(c)(6).

(6) Procedures for closure equivalency determination.

(i) If a facility owner/operator seeks an equivalency demonstration under Subsection R315-270-1(c)(5), the Director shall provide the public, through a newspaper notice, the opportunity to submit written comments on the information submitted by the owner/operator within 30 days from the date of the notice. The Director shall also, in response to a request or at the Director's discretion, hold a public hearing whenever such a hearing might clarify one or more issues concerning the equivalence of the Rule R315-265 closure to a Rule R315-264 closure. The Director shall give public notice of the hearing at least 30 days before it occurs. Public notice of the hearing may be given at the same time as notice of the opportunity for the public to submit written comments, and the two notices may be combined.

(ii) The Director shall determine whether the Rule R315-265 closure met the Rule R315-264 closure by removal or decontamination requirements within 90 days of its receipt. If the Director finds that the closure did not meet the applicable Rule R315-264 standards, the Director shall provide the owner/operator with a written statement of the reasons why the closure failed to meet Rule R315-264 standards. The owner/operator may submit additional information in support of an equivalency demonstration within 30 days after receiving such written statement. The Director shall review any additional

information submitted and make a final determination within 60 days.

(iii) If the Director determines that the facility did not close in accordance with Rule R315-264 closure by removal standards, the facility is subject to post-closure permitting requirements.

(7) Enforceable documents for post-closure care. At the discretion of the Director, an owner or operator may obtain, in lieu of a post-closure permit, an enforceable document imposing the requirements of 40 CFR 265.121, which is adopted by reference. "Enforceable document" means an order, a permit, or other document issued by the Director including, but not limited to, a corrective action order issued by EPA under section 3008(h), a CERCLA remedial action, or a closure or post-closure permit.

R315-270-2. Hazardous Waste Permit Program -- Definitions.

The following definitions apply to Rules R315-270 and 124. Terms not defined in Section R315-270-2 have the meaning given by Section R315-260-10 and Section 19-6-102.

(a) "Administrator" means the Administrator of the United States Environmental Protection Agency, or an authorized representative.

(b) "Application" means the information required by the Director under Section R315-270-14 through 29.

(c) "Aquifer" means a geological formation, group of formations, or part of a formation that is capable of yielding a significant amount of water to a well or spring.

(d) "Closure" means the act of securing a Hazardous Waste Management facility pursuant to the requirements of Rule R315-264.

(e) "Component" means any constituent part of a unit or any group of constituent parts of a unit which are assembled to perform a specific function, e.g., a pump seal, pump, kiln liner, kiln thermocouple.

(f) "Corrective Action Management Unit" or CAMU means an area within a facility that is designated by the Director under Sections R315-264-550 through 555 for the purpose of implementing corrective action requirements under Section R315-264-101 and RCRA section 3008(h). A CAMU shall only be used for the management of remediation wastes pursuant to implementing such corrective action requirements at the facility.

(g) "CWA" means the Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act amendments of 1972) Pub. L. 92-500, as amended by Pub. L. 92-217 and Pub. L. 95-576; 33 U.S.C. 1251 et seq.

(h) "Director" means the Director of the Division of Waste Management and Radiation Control.

(i) "Disposal" has the meaning as found in Section 19-6-102.

(j) "Disposal facility" means a facility or part of a facility at which hazardous waste is intentionally placed into or on the land or water, and at which hazardous waste will remain after closure. The term disposal facility does not include a corrective action management unit into which remediation wastes are placed.

(k) "Draft permit" means a document prepared under Section R315-124-6 indicating the Director's tentative decision to issue or deny, modify, revoke and reissue, terminate, or reissue a permit. A notice of intent to terminate a permit, and a notice of intent to deny a permit, as discussed in Section R315-124-5, are types of draft permits. A denial of a request for modification, revocation and reissuance, or termination, as discussed in Section R315-124-5 is not a "draft permit." A proposed permit is not a draft permit.

(l) "Elementary neutralization unit" means a device which:

(1) Is used for neutralizing wastes only because they exhibit the corrosivity characteristic defined in Section R315-261-22, or are listed in Sections R315-261-30 through 35 only for this reason; and

(2) Meets the definition of tank, tank system, container, transport vehicle, or vessel in Section R315-260-10.

(m) "Emergency permit" means a permit issued in accordance with Section R315-270-61.

(n) "Environmental Protection Agency (EPA)" means the United States Environmental Protection Agency.

(o) "EPA" means the United States Environmental Protection Agency.

(p) "Existing hazardous waste management (HWM) facility" or "existing facility" means a facility which was in operation or for which construction commenced on or before November 19, 1980. A facility has commenced construction if:

(1) The owner or operator has obtained the Federal, State and local approvals or permits necessary to begin physical construction; and either

(2)(i) A continuous on-site, physical construction program has begun; or

(ii) The owner or operator has entered into contractual obligations which cannot be cancelled or modified without substantial loss-for physical construction of the facility to be completed within a reasonable time.

(q) "Facility mailing list" means the mailing list for a facility maintained by the Director in accordance with Subsection R315-124-10(c)(1)(ix).

(r) "Facility" or "activity" means any HWM facility or any other facility or activity, including land or appurtenances thereto, that is subject to regulation under Sections 19-6-101 through 125.

(s) "Federal, State and local approvals or permits necessary to begin physical construction" means permits and approvals required under Federal, State or local hazardous waste control statutes, regulations or ordinances.

(t) "Functionally equivalent component" means a component which performs the same function or measurement and which meets or exceeds the performance specifications of another component.

(u) "Generator" means any person, by site location, whose act, or process produces "hazardous waste" identified or listed in Rule R315-261.

(v) "Ground water" means water below the land surface in a zone of saturation.

(w) "Hazardous waste" means a hazardous waste as defined in Section 19-6-102 and further defined in Section R315-261-3.

(x) "Hazardous Waste Management facility" means all contiguous land, and structures, other appurtenances, and improvements on the land, used for treating, storing, or disposing of hazardous waste. A facility may consist of several treatment, storage, or disposal operational units, for example, one or more landfills, surface impoundments, or combinations of them.

(y) "HWM facility" means Hazardous Waste Management facility.

(z) "Injection well" means a well into which fluids are being injected.

(aa) "In operation" means a facility which is treating, storing, or disposing of hazardous waste.

(bb) "Major facility" means any facility or activity classified as such by the Regional Administrator in conjunction with the Director.

(cc) "Manifest" means the shipping document originated and signed by the generator which contains the information required by Sections R315-262-20 through 27.

(dd) "National Pollutant Discharge Elimination System" means the national program for issuing, modifying, revoking

and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under sections 307, 402, 318, and 405 of the CWA. The term includes an approved program.

(ee) "NPDES" means National Pollutant Discharge Elimination System.

(ff) "New HWM facility" means a Hazardous Waste Management facility which began operation or for which construction commenced after November 19, 1980.

(gg) "Off-site" means any site which is not on-site.

(hh) "On-site" means on the same or geographically contiguous property which may be divided by public or private right(s)-of-way, provided the entrance and exit between the properties is at a cross-roads intersection, and access is by crossing as opposed to going along, the right(s)-of-way. Non-contiguous properties owned by the same person but connected by a right-of-way which the person controls and to which the public does not have access, is also considered on-site property.

(ii) "Owner or operator" means the owner or operator of any facility or activity subject to regulation under Sections 19-6-101 through 125.

(jj) "Permit" means an operation plan under Section 19-6-108 to implement the requirements of Rules R315-270 and 124. Permit includes permit by rule, Section R315-270-60, and emergency permit, Section R315-270-61. Permit does not include interim status, Sections R315-270-70 through 73, or any permit which has not been the subject of final action by the Director, such as a draft permit or a proposed permit.

(kk) "Permit-by-rule" means a provision of these rules stating that a facility or activity is deemed to have a permit if it meets the requirements of the provision.

(ll) "Person" means person as defined in Subsection 19-1-103(4).

(mm) "Physical construction" means excavation, movement of earth, erection of forms or structures, or similar activity to prepare an HWM facility to accept hazardous waste.

(nn) "POTW" means publicly owned treatment works.

(oo) "Publicly owned treatment works" means any device or system used in the treatment, including recycling and reclamation, of municipal sewage or industrial wastes of a liquid nature which is owned by a State or municipality. This definition includes sewers, pipes, or other conveyances only if they convey wastewater to a POTW providing treatment.

(pp) "RCRA" means the Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act of 1976, Pub. L. 94-580, as amended by Pub. L. 95-609 and Pub. L. 96-482, 42 U.S.C. 6901 et seq.

(qq) "Regional Administrator" means the Regional Administrator of the appropriate Regional Office of the Environmental Protection Agency or the authorized representative of the Regional Administrator.

(rr) "Remedial Action Plan" (RAP) means a special form of permit that a facility owner or operator may obtain instead of a permit issued under Sections R315-270-3 through 66, to authorize the treatment, storage or disposal of hazardous remediation waste, as defined in Section R315-260-10, at a remediation waste management site.

(ss) "Schedule of compliance" means a schedule of remedial measures included in a permit, including an enforceable sequence of interim requirements, for example, actions, operations, or milestone events, leading to compliance with Sections 19-6-101 through 125 and rules adopted thereunder.

(tt) "SDWA" means the Safe Drinking Water Act, Pub. L. 95-523, as amended by Pub. L. 95-1900; 42 U.S.C. 3001 et seq.

(uu) "Site" means the land or water area where any facility or activity is physically located or conducted, including adjacent land used in connection with the facility or activity.

(vv) "State" means any of the 50 States, the District of

Columbia, Guam, the Commonwealth of Puerto Rico, the Virgin Islands, American Samoa, and the Commonwealth of the Northern Mariana Islands.

(ww) "Storage" means the holding of hazardous waste for a temporary period, at the end of which the hazardous waste is treated, disposed, or stored elsewhere.

(xx) "Transfer facility" means any transportation-related facility including loading docks, parking areas, storage areas and other similar areas where shipments of hazardous waste are held during the normal course of transportation.

(yy) "Transporter" means a person engaged in the off-site transportation of hazardous waste by air, rail, highway or water.

(zz) "Treatment" means any method, technique, or process, including neutralization, designed to change the physical, chemical, or biological character or composition of any hazardous waste so as to neutralize such wastes, or so as to recover energy or material resources from the waste, or so as to render such waste non-hazardous, or less hazardous; safer to transport, store, or dispose of; or amenable for recovery, amenable for storage, or reduced in volume.

(aaa) "UIC" means the Underground Injection Control Program under part C of the Safe Drinking Water Act, including an approved program.

(bbb) "Underground injection" means a well injection.

(ccc) "Underground source of drinking water" means an aquifer or its portion:

- (1)(i) Which supplies any public water system; or
- (ii) Which contains a sufficient quantity of ground water to supply a public water system; and
 - (A) Currently supplies drinking water for human consumption; or
 - (B) Contains fewer than 10,000 mg/l total dissolved solids; and
- (2) Which is not an exempted aquifer.

(ddd) "USDW" means underground source of drinking water.

(eee) "Wastewater treatment unit" means a device which:

- (1) Is part of a wastewater treatment facility which is subject to regulation under Rule R317-1 through 15; and
- (2) Receives and treats or stores an influent wastewater which is a hazardous waste as defined in Section R315-261-3, or generates and accumulates a wastewater treatment sludge which is a hazardous waste as defined in Section R315-261-3, or treats or stores a wastewater treatment sludge which is a hazardous waste as defined in Section R315-261-3; and
- (3) Meets the definition of tank or tank system in Section R315-260-10.

R315-270-4. Hazardous Waste Permit Program -- Effect of a Permit.

(a)(1) Compliance with a permit during its term constitutes compliance, for purposes of enforcement, with Rules R315-260 through 266, 268, 270 and 124 except for those requirements not included in the permit which:

- (i) Become effective by statute;
- (ii) Are promulgated under Rule R315-268 restricting the placement of hazardous wastes in or on the land;
- (iii) Are promulgated under Rule R315-264 regarding leak detection systems for new and replacement surface impoundment, waste pile, and landfill units, and lateral expansions of surface impoundment, waste pile, and landfill units. The leak detection system requirements include double liners, CQA programs, monitoring, action leakage rates, and response action plans, and shall be implemented through the procedures of Section R315-270-42 Class 1 permit modifications; or
- (iv) Are promulgated under 40 CFR 265.1030 through 1035, 1050 through 1064, or 1080 through 1090, which are adopted by reference limiting air emissions.

(2) A permit may be modified, revoked and reissued, or terminated during its term for cause as set forth in Sections R315-270-41 and 43, or the permit may be modified upon the request of the permittee as set forth in Section R315-270-42.

(b) The issuance of a permit does not convey any property rights of any sort, or any exclusive privilege.

(c) The issuance of a permit does not authorize any injury to persons or property or invasion of other private rights, or any infringement of State or local law or regulations.

R315-270-10. Hazardous Waste Permit Program -- General Application Requirements.

(a) Applying for a permit. Below is information on how to obtain a permit and where to find requirements for specific permits:

(1) If you are covered by permits by rule, Section R315-270-60, you need not apply.

(2) If you currently have interim status, you shall apply for permits when required by the Director.

(3) If you are required to have a permit, including new applicants and permittees with expiring permits, you shall complete, sign, and submit an application to the Director, as described in Section R315-270-10 and Sections R315-270-70 through 73.

(4) If you are seeking an emergency permit, the procedures for application, issuance, and administration are found exclusively in Section R315-270-61.

(5) If you are seeking a research, development, and demonstration permit, the procedures for application, issuance, and administration are found exclusively in Section R315-270-65.

(b) Who applies? When a facility or activity is owned by one person but is operated by another person, it is the operator's duty to obtain a permit, except that the owner shall also sign the permit application.

(c) Completeness.

(1) The Director shall not issue a permit before receiving a complete application for a permit except for permits by rule, or emergency permits. An application for a permit is complete when the Director receives an application form and any supplemental information which are completed to the Director's satisfaction. An application for a permit is complete notwithstanding the failure of the owner or operator to submit the exposure information described in Subsection R315-270-10(j). The Director may deny a permit for the active life of a hazardous waste management facility or unit before receiving a complete application for a permit.

(2) The Director shall review for completeness every permit application. Each permit application submitted by a new hazardous waste management facility, should be reviewed for completeness by the Director in accordance with the applicable review periods of 19-6-108. Upon completing the review, the Director shall notify the applicant in writing whether the permit application is complete. If the permit application is incomplete, the Director shall list the information necessary to make the permit application complete. When the permit application is for an existing hazardous waste management facility, the Director shall specify in the notice of deficiency a date for submitting the necessary information. The Director shall review information submitted in response to a notice of deficiency within 30 days after receipt. The Director shall notify the applicant that the permit application is complete upon receiving this information. After the permit application is complete, the Director may request additional information from an applicant but only when necessary to clarify, modify, or supplement previously submitted material.

(3) If an applicant fails or refuses to correct deficiencies in the permit application, the permit application may be denied and appropriate enforcement actions may be taken under the

applicable provisions of the Utah Solid and Hazardous Waste Act.

(d) Information requirements. All applicants for permits shall provide information set forth in Section R315-270-13 and applicable sections in Sections R315-270-14 through 29 to the Director, using the application form provided by the Director, if the Director has made such forms available.

(e) Existing HWM facilities and interim status qualifications.

(1) Owners and operators of existing hazardous waste management facilities or of hazardous waste management facilities in existence on the effective date of statutory or regulatory amendments under Sections 19-6-101 through 125 that render the facility subject to the requirement to have a permit shall submit part A of their permit application no later than:

(i) Six months after the date of publication of regulations which first require them to comply with the standards set forth in Rules R315-265 or 266, or

(ii) Thirty days after the date they first become subject to the standards set forth in Rules R315-265 or 266, whichever first occurs.

(iii) For generators generating greater than 100 kilograms but less than 1000 kilograms of hazardous waste in a calendar month and treats, stores, or disposes of these wastes on-site, by March 24, 1987.

(2) Reserved

(3) The Director may by compliance order extend the date by which the owner and operator of an existing hazardous waste management facility shall submit part A of their permit application.

(4) The owner or operator of an existing hazardous waste management facility may be required to submit part B of their permit application. The Director may require submission of part B. Any owner or operator shall be allowed at least six months from the date of request to submit part B of the application. Any owner or operator of an existing hazardous waste management facility may voluntarily submit part B of the application at any time. Notwithstanding the above, any owner or operator of an existing hazardous waste management facility shall submit a part B permit application in accordance with the dates specified in Section R315-270-73. Any owner or operator of a land disposal facility in existence on the effective date of statutory or regulatory amendments under Sections 19-6-101 through 125 that render the facility subject to the requirement to have a permit shall submit a part B application in accordance with the dates specified in Section R315-270-73.

(5) Failure to furnish a requested part B application on time, or to furnish in full the information required by the part B application, is grounds for termination of interim status under Rule R315-124.

(f) New HWM facilities.

(1) Except as provided in Subsection R315-270-10(f)(3), no person shall begin physical construction of a new HWM facility without having submitted parts A and B of the permit application and having received a finally effective permit.

(2) An application for a permit for a new hazardous waste management facility, including both Parts A and B, may be filed any time after promulgation of those standards in Sections R315-264-170 through 1202 applicable to such facility. The application shall be filed with the Director. Except as provided in Subsection R315-270-10(f)(3), all applications shall be submitted at least 180 days before physical construction is expected to commence.

(3) Notwithstanding Subsection R315-270-10(f)(1), the owner or operator of a facility approved for the incineration of polychlorinated biphenyls may, at any time after construction or operation of such facility has begun, file an application for a permit to incinerate hazardous waste authorizing such facility to

incinerate waste identified or listed under Rule R315-261.

(g) Updating permit applications.

(1) If any owner or operator of a hazardous waste management facility has filed Part A of a permit application and has not yet filed part B, the owner or operator shall file an amended part A application:

(i) With the Director, within six months after the promulgation of revised regulations under Rule R315-261 listing or identifying additional hazardous wastes, if the facility is treating, storing or disposing of any of those newly listed or identified wastes.

(ii) With the Director no later than the effective date of regulatory provisions listing or designating wastes as hazardous in addition to those listed or designated previously, if the facility is treating storing or disposing of any of those newly listed or designated wastes; or

(iii) As necessary to comply with provisions of Section R315-270-72 for changes during interim status. Revised Part A applications necessary to comply with the provisions of Section R315-270-72 shall be filed with the Director.

(2) The owner or operator of a facility who fails to comply with the updating requirements of Subsection R315-270-10(g)(1) does not receive interim status as to the wastes not covered by duly filed part A applications.

(h) Reapplying for a permit. Owners and operators that have an effective permit and want to reapply for a new one, shall:

(1) Submit a new application at least 180 days before the expiration date of the effective permit, unless the Director allows a later date;

(2) The Director may not allow submittal of applications or Notices of Intent later than the expiration date of the existing permit, except as allowed by Subsection R315-270-51(e)(2).

(i) Recordkeeping. Applicants shall keep records of all data used to complete permit applications and any supplemental information submitted under Subsection R315-270-10(d) and Sections R315-270-13 through 21 for a period of at least 3 years from the date the application is signed.

(j) Exposure information.

(1) Any part B permit application submitted by an owner or operator of a facility that stores, treats, or disposes of hazardous waste in a surface impoundment or a landfill shall be accompanied by information, reasonably ascertainable by the owner or operator, on the potential for the public to be exposed to hazardous wastes or hazardous constituents through releases related to the unit. At a minimum, such information shall address:

(i) Reasonably foreseeable potential releases from both normal operations and accidents at the unit, including releases associated with transportation to or from the unit;

(ii) The potential pathways of human exposure to hazardous wastes or constituents resulting from the releases described under Subsection R315-270-10(j)(1)(i); and

(iii) The potential magnitude and nature of the human exposure resulting from such releases.

(2) Owners and operators of a landfill or a surface impoundment who have already submitted a part B application shall submit the exposure information required in Subsection R315-270-10(j)(1).

(k) The Director may require a permittee or an applicant to submit information in order to establish permit conditions under Sections R315-270-32(b)(2) and 50(d).

(l) If the Director concludes, based on one or more of the factors listed in Subsection R315-270-10(1)(1) that compliance with the standards of Subsection R307-214-2(39) which incorporates 40 CFR part 63, subpart EEE alone may not be protective of human health or the environment, the Director shall require the additional information or assessment(s) necessary to determine whether additional controls are

necessary to ensure protection of human health and the environment. This includes information necessary to evaluate the potential risk to human health and/or the environment resulting from both direct and indirect exposure pathways. The Director may also require a permittee or applicant to provide information necessary to determine whether such an assessment(s) should be required.

(1) The Director shall base the evaluation of whether compliance with the standards of Subsection R307-214-2(39) which incorporates 40 CFR part 63, subpart EEE alone is protective of human health or the environment on factors relevant to the potential risk from a hazardous waste combustion unit, including, as appropriate, any of the following factors:

(i) Particular site-specific considerations such as proximity to receptors, such as schools, hospitals, nursing homes, day care centers, parks, community activity centers, or other potentially sensitive receptors, unique dispersion patterns, etc.;

(ii) Identities and quantities of emissions of persistent, bioaccumulative or toxic pollutants considering enforceable controls in place to limit those pollutants;

(iii) Identities and quantities of nondioxin products of incomplete combustion most likely to be emitted and to pose significant risk based on known toxicities, confirmation of which should be made through emissions testing;

(iv) Identities and quantities of other off-site sources of pollutants in proximity of the facility that significantly influence interpretation of a facility-specific risk assessment;

(v) Presence of significant ecological considerations, such as the proximity of a particularly sensitive ecological area;

(vi) Volume and types of wastes, for example wastes containing highly toxic constituents;

(vii) Other on-site sources of hazardous air pollutants that significantly influence interpretation of the risk posed by the operation of the source in question;

(viii) Adequacy of any previously conducted risk assessment, given any subsequent changes in conditions likely to affect risk; and

(ix) Such other factors as may be appropriate.

R315-270-11. Hazardous Waste Permit Program -- Signatories to Permit Applications and Reports.

(a) Applications. All permit applications shall be signed as follows:

(1) For a corporation: By a principal executive officer of at least the level of vice-president;

(2) For a partnership or sole proprietorship; by a general partner or the proprietor, respectively; or

(3) For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official.

(b) Reports. All reports required by permits and other information requested by the Director shall be signed by a person described in Subsection R315-270-11(a), or by a duly authorized representative of that person. A person is a duly authorized representative only if:

(1) The authorization is made in writing by a person described in Subsection R315-270-11(a);

(2) The authorization specifies either an individual or a position having responsibility for overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, or position of equivalent responsibility. A duly authorized representative may thus be either a named individual or any individual occupying a named position; and

(3) The written authorization is submitted to the Director.

(c) Changes to authorization. If an authorization under Subsection R315-270-11(b) is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the

requirements of Subsection R315-270-11(b) shall be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.

(d)(1) Any person signing a document under Subsection R315-270-11(a) or (b) shall make the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

(2) For remedial action plans (RAPs) under Sections R315-270-79 through 230, if the operator certifies according to Subsection R315-270-11(d)(1), then the owner may choose to make the following certification instead of the certification in Subsection R315-270-11(d)(1):

Based on my knowledge of the conditions of the property described in the RAP and my inquiry of the person or persons who manage the system referenced in the operator's certification, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

R315-270-12. Hazardous Waste Permit Program -- Confidentiality of Information.

(a) Any information provided to The Director under Rule R315-270 shall be made available to the public to the extent and in the manner authorized by Sections 63G-2-101 through 901.

(b) Any person who submits information to the Director in accordance with Rule R315-270 may assert a claim of business confidentiality covering part or all of that information by following the procedures set forth in Section 63G-2-309. Information covered by such a claim shall be disclosed by the Director only to the extent, and by means of the procedures, set forth Sections 63G-2-101 through 901. However, if no claim under Sections 63G-2-101 through 804 accompanies the information when it is received by the Director, it may be made available to the public without further notice to the person submitting it.

(c) Claims of confidentiality for the name and address of any permit applicant or permittee shall be denied.

R315-270-13. Hazardous Waste Permit Program -- Contents of Part a of the Permit Application.

Part A of the permit application shall be submitted to the Director and include the following information:

(a) The activities conducted by the applicant which require it to obtain a permit under Section 19-6-108.

(b) Name, mailing address, and location, including latitude and longitude of the facility for which the application is submitted.

(c) Up to four SIC codes which best reflect the principal products or services provided by the facility.

(d) The operator's name, address, telephone number, ownership status, and status as Federal, State, private, public, or other entity.

(e) The name, address, and phone number of the owner of the facility.

(f) Whether the facility is located on Indian lands.

(g) An indication of whether the facility is new or existing

and whether it is a first or revised application.

(h) For existing facilities,

(1) a scale drawing of the facility showing the location of all past, present, and future treatment, storage, and disposal areas; and

(2) photographs of the facility clearly delineating all existing structures; existing treatment, storage, and disposal areas; and sites of future treatment, storage, and disposal areas.

(i) A description of the processes to be used for treating, storing, and disposing of hazardous waste, and the design capacity of these items.

(j) A specification of the hazardous wastes listed or designated under Rule R315-261 to be treated, stored, or disposed of at the facility, an estimate of the quantity of such wastes to be treated, stored, or disposed annually, and a general description of the processes to be used for such wastes.

(k) A listing of all permits or construction approvals received or applied for under any of the following programs:

(1) Hazardous Waste Management program under Sections 19-6-101 through 125 or under RCRA.

(2) UIC program under the SWDA.

(3) NPDES program under the CWA.

(4) Prevention of Significant Deterioration (PSD) program under the Clean Air Act.

(5) Nonattainment program under the Clean Air Act.

(6) National Emission Standards for Hazardous Pollutants (NESHAPS) preconstruction approval under the Clean Air Act.

(7) Reserved

(8) Dredge or fill permits under section 404 of the CWA.

(9) Other relevant environmental permits, including State permits.

(l) A topographic map, or other map if a topographic map is unavailable, extending one mile beyond the property boundaries of the source, depicting the facility and each of its intake and discharge structures; each of its hazardous waste treatment, storage, or disposal facilities; each well where fluids from the facility are injected underground; and those wells, springs, other surface water bodies, and drinking water wells listed in public records or otherwise known to the applicant within 1/4 mile of the facility property boundary.

(m) A brief description of the nature of the business.

(n) For hazardous debris, a description of the debris category(ies) and contaminant category(ies) to be treated, stored, or disposed of at the facility.

R315-270-14. Hazardous Waste Permit Program-- Contents of Part B: General Requirements.

(a) Part B of the permit application consists of the general information requirements of Section R315-270-14, and the specific information requirements in Section R315-270-14 through 29 applicable to the facility. The part B information requirements presented in Sections R315-270-14 through 29 reflect the standards promulgated in Rule R315-264. These information requirements are necessary in order for the Director to determine compliance with the Rule R315-264 standards. If owners and operators of hazardous waste management facilities can demonstrate that the information prescribed in part B cannot be provided to the extent required, the Director may make allowance for submission of such information on a case-by-case basis. Information required in part B shall be submitted to the Director and signed in accordance with the requirements in Section R315-270-11. Certain technical data, such as design drawings and specifications, and engineering studies shall be certified by a qualified Professional Engineer. For post-closure permits, only the information specified in Section R315-270-28 is required in part B of the permit application.

(b) General information requirements. The following information is required for all hazardous waste management facilities, except as Section R315-264-1 provides otherwise:

(1) A general description of the facility.

(2) Chemical and physical analyses of the hazardous waste and hazardous debris to be handled at the facility. At a minimum, these analyses shall contain all the information which must be known to treat, store, or dispose of the wastes properly in accordance with Rule R315-264.

(3) A copy of the waste analysis plan required by Subsection R315-264-13(b) and, if applicable Subsection R315-264-13(c).

(4) A description of the security procedures and equipment required by Section R315-264-14, or a justification demonstrating the reasons for requesting a waiver of this requirement.

(5) A copy of the general inspection schedule required by Subsection R315-264-15(b). Include where applicable, as part of the inspection schedule, specific requirements in Section R315-264-174, Subsection R315-264-193(i), Sections R315-264-195, 226, 254, 273, 303, 602, 1033, 1052, 1053, 1058, 1084, 1085, 1086, and 1088.

(6) A justification of any request for a waiver(s) of the preparedness and prevention requirements of Sections R315-264-30 through 37.

(7) A copy of the contingency plan required by Section R315-264-50 through 56. Include, where applicable, as part of the contingency plan, specific requirements in Sections R315-264-227, 255, and 200.

(8) A description of procedures, structures, or equipment used at the facility to:

(i) Prevent hazards in unloading operations, for example, ramps, special forklifts;

(ii) Prevent runoff from hazardous waste handling areas to other areas of the facility or environment, or to prevent flooding, for example, berms, dikes, trenches;

(iii) Prevent contamination of water supplies;

(iv) Mitigate effects of equipment failure and power outages;

(v) Prevent undue exposure of personnel to hazardous waste, for example, protective clothing; and

(vi) Prevent releases to atmosphere.

(9) A description of precautions to prevent accidental ignition or reaction of ignitable, reactive, or incompatible wastes as required to demonstrate compliance with Section R315-264-17 including documentation demonstrating compliance with Subsection R315-264-17(c).

(10) Traffic pattern, estimated volume, number, types of vehicles, and control, for example, show turns across traffic lanes, and stacking lanes, if appropriate; describe access road surfacing and load bearing capacity; show traffic control signals.

(11) Facility location information;

(i) In order to determine the applicability of the seismic standard, Subsection R315-264-18(a), the owner or operator of a new facility shall identify the political jurisdiction, e.g., county, township, or election district, in which the facility is proposed to be located. If the county or election district is not listed in appendix VI of Rule R315-264, no further information is required to demonstrate compliance with Subsection R315-264-18(a).

(ii) If the facility is proposed to be located in an area listed in appendix VI of Rule R315-264, the owner or operator shall demonstrate compliance with the seismic standard. This demonstration may be made using either published geologic data or data obtained from field investigations carried out by the applicant. The information provided shall be of such quality to be acceptable to geologists experienced in identifying and evaluating seismic activity. The information submitted shall show that either:

(A) No faults which have had displacement in Holocene time are present, or no lineations which suggest the presence of a fault, which have displacement in Holocene time, within 3,000

feet of a facility are present, based on data from:

- (1) Published geologic studies,
- (2) Aerial reconnaissance of the area within a five-mile radius from the facility.
- (3) An analysis of aerial photographs covering a 3,000 foot radius of the facility, and
- (4) If needed to clarify the above data, a reconnaissance based on walking portions of the area within 3,000 feet of the facility, or

(B) If faults, to include lineations, which have had displacement in Holocene time are present within 3,000 feet of a facility, no faults pass within 200 feet of the portions of the facility where treatment, storage, or disposal of hazardous waste will be conducted, based on data from a comprehensive geologic analysis of the site. Unless a site analysis is otherwise conclusive concerning the absence of faults within 200 feet of such portions of the facility data shall be obtained from a subsurface exploration, trenching, of the area within a distance no less than 200 feet from portions of the facility where treatment, storage, or disposal of hazardous waste will be conducted. Such trenching shall be performed in a direction that is perpendicular to known faults, which have had displacement in Holocene time, passing within 3,000 feet of the portions of the facility where treatment, storage, or disposal of hazardous waste will be conducted. Such investigation shall document with supporting maps and other analyses, the location of faults found. The Guidance Manual for the Location Standards provides greater detail on the content of each type of seismic investigation and the appropriate conditions under which each approach or a combination of approaches would be used.

(iii) Owners and operators of all facilities shall provide an identification of whether the facility is located within a 100-year floodplain. This identification shall indicate the source of data for such determination and include a copy of the relevant Federal Insurance Administration (FIA) flood map, if used, or the calculations and maps used where an FIA map is not available. Information shall also be provided identifying the 100-year flood level and any other special flooding factors, e.g., wave action, which shall be considered in designing, constructing, operating, or maintaining the facility to withstand washout from a 100-year flood. Where maps for the National Flood Insurance Program produced by the Federal Insurance Administration of the Federal Emergency Management Agency are available, they will normally be determinative of whether a facility is located within or outside of the 100-year floodplain. However, where the FIA map excludes an area, usually areas of the floodplain less than 200 feet in width, these areas shall be considered and a determination made as to whether they are in the 100-year floodplain. Where FIA maps are not available for a proposed facility location, the owner or operator shall use equivalent mapping techniques to determine whether the facility is within the 100-year floodplain, and if so located, what the 100-year flood elevation would be.

(iv) Owners and operators of facilities located in the 100-year floodplain shall provide the following information:

(A) Engineering analysis to indicate the various hydrodynamic and hydrostatic forces expected to result at the site as consequence of a 100-year flood.

(B) Structural or other engineering studies showing the design of operational units, e.g., tanks, incinerators, and flood protection devices, e.g., floodwalls, dikes, at the facility and how these will prevent washout.

(C) If applicable, and in lieu of Subsections R315-270-14(b)(11)(iv)(A) and (B), a detailed description of procedures to be followed to remove hazardous waste to safety before the facility is flooded, including:

(I) Timing of such movement relative to flood levels, including estimated time to move the waste, to show that such

movement can be completed before floodwaters reach the facility.

(II) A description of the location(s) to which the waste will be moved and demonstration that those facilities will be eligible to receive hazardous waste in accordance with the regulations under Rules R315-270, 124, and 264 through 266.

(III) The planned procedures, equipment, and personnel to be used and the means to ensure that such resources will be available in time for use.

(IV) The potential for accidental discharges of the waste during movement.

(v) Existing facilities NOT in compliance with Subsection R315-264-18(b) shall provide a plan showing how the facility will be brought into compliance and a schedule for compliance.

(12) An outline of both the introductory and continuing training programs by owners or operators to prepare persons to operate or maintain the hazardous waste management facility in a safe manner as required to demonstrate compliance with Section R315-264-16. A brief description of how training will be designed to meet actual job tasks in accordance with requirements in Subsection R315-264-16(a)(3).

(13) A copy of the closure plan and, where applicable, the post-closure plan required by Sections R315-264-112, 118, and 197. Include, where applicable, as part of the plans, specific requirements in Sections R315-264-178, 197, 228, 258, 280, 310, 351, 601, and 603.

(14) For hazardous waste disposal units that have been closed, documentation that notices required under Section R315-264-119 have been filed.

(15) The most recent closure cost estimate for the facility prepared in accordance with Section R315-264-142 and a copy of the documentation required to demonstrate financial assurance under Section R315-264-143. For a new facility, a copy of the required documentation may be submitted 60 days prior to the initial receipt of hazardous wastes, if that is later than the submission of the part B.

(16) Where applicable, the most recent post-closure cost estimate for the facility prepared in accordance with Section R315-264-144 plus a copy of the documentation required to demonstrate financial assurance under Section R315-264-145. For a new facility, a copy of the required documentation may be submitted 60 days prior to the initial receipt of hazardous wastes, if that is later than the submission of the part B.

(17) Where applicable, a copy of the insurance policy or other documentation which comprises compliance with the requirements of Section R315-264-147. For a new facility, documentation showing the amount of insurance meeting the specification of Subsection R315-264-147(a) and, if applicable, Subsection R315-264-147(b), that the owner or operator plans to have in effect before initial receipt of hazardous waste for treatment, storage, or disposal. A request for a variance in the amount of required coverage, for a new or existing facility, may be submitted as specified in Subsection R315-264-147(c).

(18) Where appropriate, proof of coverage by a State financial mechanism in compliance with Section R315-264-149 or Section R315-264-150.

(19) A topographic map showing a distance of 1,000 feet around the facility at a scale of 2.5 centimeters, 1 inch, equal to not more than 61.0 meters, 200 feet. Contours shall be shown on the map. The contour interval shall be sufficient to clearly show the pattern of surface water flow in the vicinity of and from each operational unit of the facility. For example, contours with an interval of 1.5 meters, 5 feet, if relief is greater than 6.1 meters, 20 feet, or an interval of 0.6 meters, 2 feet, if relief is less than 6.1 meters, 20 feet. Owners and operators of hazardous waste management facilities located in mountainous areas should use large contour intervals to adequately show topographic profiles of facilities. The map shall clearly show the following:

- (i) Map scale and date.
- (ii) 100-year floodplain area.
- (iii) Surface waters including intermittent streams.
- (iv) Surrounding land uses, residential, commercial, agricultural, recreational.
- (v) A wind rose, i.e., prevailing wind-speed and direction.
- (vi) Orientation of the map, north arrow.
- (vii) Legal boundaries of the hazardous waste management facility site.
- (viii) Access control, fences, gates.
- (ix) Injection and withdrawal wells both on-site and off-site.
- (x) Buildings; treatment, storage, or disposal operations; or other structure, recreation areas, runoff control systems, access and internal roads, storm, sanitary, and process sewerage systems, loading and unloading areas, fire control facilities, etc.
- (xi) Barriers for drainage or flood control.
- (xii) Location of operational units within the hazardous waste management facility site, where hazardous waste is, or will be, treated, stored, or disposed, include equipment cleanup areas. For large hazardous waste management facilities the Director may allow the use of other scales on a case-by-case basis.

(20) Applicants may be required to submit such information as may be necessary to enable the Director to carry out his duties under State and Federal laws.

(21) For land disposal facilities, if a case-by-case extension has been approved under Section R315-268-5 or a petition has been approved under Section R315-268-6, a copy of the notice of approval for the extension or petition is required.

(22) A summary of the pre-application meeting, along with a list of attendees and their addresses, and copies of any written comments or materials submitted at the meeting, as required under Subsection R315-124-31(c).

(c) Additional information requirements. The following additional information regarding protection of groundwater is required from owners or operators of hazardous waste facilities containing a regulated unit except as provided in Subsection R315-264-90(b):

(1) A summary of the ground-water monitoring data obtained during the interim status period under 40 CFR 265.90 through 94, which are adopted by reference, where applicable.

(2) Identification of the uppermost aquifer and aquifers hydraulically interconnected beneath the facility property, including ground-water flow direction and rate, and the basis for such identification, i.e., the information obtained from hydrogeologic investigations of the facility area.

(3) On the topographic map required under Subsection R315-270-14(b)(19), a delineation of the waste management area, the property boundary, the proposed "point of compliance" as defined under Section R315-264-95, the proposed location of ground-water monitoring wells as required under Section R315-264-97, and, to the extent possible, the information required in Subsection R315-270-14(c)(2).

(4) A description of any plume of contamination that has entered the ground water from a regulated unit at the time that the application was submitted that:

(i) Delineates the extent of the plume on the topographic map required under Subsection R315-270-14(b)(19);

(ii) Identifies the concentration of each appendix IX, of Rule R315-264, constituent throughout the plume or identifies the maximum concentrations of each appendix IX constituent in the plume.

(5) Detailed plans and an engineering report describing the proposed ground water monitoring program to be implemented to meet the requirements of Section R315-264-97.

(6) If the presence of hazardous constituents has not been detected in the ground water at the time of permit application,

the owner or operator shall submit sufficient information, supporting data, and analyses to establish a detection monitoring program which meets the requirements of Section R315-264-98. This submission shall address the following items specified under Section R315-264-98:

(i) A proposed list of indicator parameters, waste constituents, or reaction products that can provide a reliable indication of the presence of hazardous constituents in the ground water;

(ii) A proposed ground-water monitoring system;

(iii) Background values for each proposed monitoring parameter or constituent, or procedures to calculate such values; and

(iv) A description of proposed sampling, analysis and statistical comparison procedures to be utilized in evaluating ground-water monitoring data.

(7) If the presence of hazardous constituents has been detected in the ground water at the point of compliance at the time of the permit application, the owner or operator shall submit sufficient information, supporting data, and analyses to establish a compliance monitoring program which meets the requirements of Section R315-264-99. Except as provided in Subsection R315-264-98(h)(5), the owner or operator shall also submit an engineering feasibility plan for a corrective action program necessary to meet the requirements of Section R315-264-100, unless the owner or operator obtains written authorization in advance from the Director to submit a proposed permit schedule for submittal of such a plan. To demonstrate compliance with Section R315-264-99, the owner or operator shall address the following items:

(i) A description of the wastes previously handled at the facility;

(ii) A characterization of the contaminated ground water, including concentrations of hazardous constituents;

(iii) A list of hazardous constituents for which compliance monitoring will be undertaken in accordance with Sections R315-264-97 and 99;

(iv) Proposed concentration limits for each hazardous constituent, based on the criteria set forth in Subsection R315-264-94(a), including a justification for establishing any alternate concentration limits;

(v) Detailed plans and an engineering report describing the proposed ground-water monitoring system, in accordance with the requirements of Section R315-264-97; and

(vi) A description of proposed sampling, analysis and statistical comparison procedures to be utilized in evaluating ground-water monitoring data.

(8) If hazardous constituents have been measured in the ground water which exceed the concentration limits established under Section R315-264-94 Table 1, or if ground water monitoring conducted at the time of permit application under 40 CFR 265.90 through 94, which are adopted by reference, at the waste boundary indicates the presence of hazardous constituents from the facility in ground water over background concentrations, the owner or operator shall submit sufficient information, supporting data, and analyses to establish a corrective action program which meets the requirements of Section R315-264-100. However, an owner or operator is not required to submit information to establish a corrective action program if he demonstrates to the Director that alternate concentration limits will protect human health and the environment after considering the criteria listed in Subsection R315-264-94(b). An owner or operator who is not required to establish a corrective action program for this reason shall instead submit sufficient information to establish a compliance monitoring program which meets the requirements of Section R315-264-99 and Subsection R315-270-14(c)(6). To demonstrate compliance with Section R315-264-100, the owner or operator shall address, at a minimum, the following items:

(i) A characterization of the contaminated ground water, including concentrations of hazardous constituents;

(ii) The concentration limit for each hazardous constituent found in the ground water as set forth in Section R315-264-94;

(iii) Detailed plans and an engineering report describing the corrective action to be taken; and

(iv) A description of how the ground-water monitoring program will demonstrate the adequacy of the corrective action.

(v) The permit may contain a schedule for submittal of the information required in Subsections R315-270-14(c)(8)(iii) and (iv) provided the owner or operator obtains written authorization from the Director prior to submittal of the complete permit application.

(d) Information requirements for solid waste management units.

(1) The following information is required for each solid waste management unit at a facility seeking a permit:

(i) The location of the unit on the topographic map required under Subsection R315-270-14(b)(19).

(ii) Designation of type of unit.

(iii) General dimensions and structural description, supply any available drawings.

(iv) When the unit was operated.

(v) Specification of all wastes that have been managed at the unit, to the extent available.

(2) The owner or operator of any facility containing one or more solid waste management units shall submit all available information pertaining to any release of hazardous wastes or hazardous constituents from such unit or units.

(3) The owner/operator shall conduct and provide the results of sampling and analysis of groundwater, landsurface, and subsurface strata, surface water, or air, which may include the installation of wells, where the Director ascertains it is necessary to complete a Facility Assessment that will determine if a more complete investigation is necessary

R315-270-15. Hazardous Waste Permit Program -- Specific Part B Information Requirements for Containers.

Except as otherwise provided in Section R315-264-170, owners or operators of facilities that store containers of hazardous waste shall provide the following additional information:

(a) A description of the containment system to demonstrate compliance with Section R315-264-175. Show at least the following:

(1) Basic design parameters, dimensions, and materials of construction.

(2) How the design promotes drainage or how containers are kept from contact with standing liquids in the containment system.

(3) Capacity of the containment system relative to the number and volume of containers to be stored.

(4) Provisions for preventing or managing run-on.

(5) How accumulated liquids can be analyzed and removed to prevent overflow.

(b) For storage areas that store containers holding wastes that do not contain free liquids, a demonstration of compliance with Subsection R315-264-175(c), including:

(1) Test procedures and results or other documentation or information to show that the wastes do not contain free liquids; and

(2) A description of how the storage area is designed or operated to drain and remove liquids or how containers are kept from contact with standing liquids.

(c) Sketches, drawings, or data demonstrating compliance with Section R315-264-176, location of buffer zone and containers holding ignitable or reactive wastes, and Subsection R315-264-177(c), location of incompatible wastes, where applicable.

(d) Where incompatible wastes are stored or otherwise managed in containers, a description of the procedures used to ensure compliance with Subsections R315-264-177(a) and (b), and Subsections R315-264-17(b) and (c).

(e) Information on air emission control equipment as required in Section R315-270-27.

R315-270-16. Hazardous Waste Permit Program -- Specific Part B Information Requirements for Tank Systems.

Except as otherwise provided in Section R315-264-190, owners and operators of facilities that use tanks to store or treat hazardous waste shall provide the following additional information:

(a) A written assessment that is reviewed and certified by a qualified Professional Engineer as to the structural integrity and suitability for handling hazardous waste of each tank system, as required under Sections R315-264-191 and 192;

(b) Dimensions and capacity of each tank;

(c) Description of feed systems, safety cutoff, bypass systems, and pressure controls, e.g., vents;

(d) A diagram of piping, instrumentation, and process flow for each tank system;

(e) A description of materials and equipment used to provide external corrosion protection, as required under Subsection R315-264-192(a)(3)(ii);

(f) For new tank systems, a detailed description of how the tank system(s) will be installed in compliance with Subsections R315-264-192(b), (c), (d), and (e);

(g) Detailed plans and description of how the secondary containment system for each tank system is or will be designed, constructed, and operated to meet the requirements of Subsections R315-264-193(a), (b), (c), (d), (e), and (f);

(h) For tank systems for which a variance from the requirements of Section R315-264-193 is sought, as provided by Subsection R315-264-193(g):

(1) Detailed plans and engineering and hydrogeologic reports, as appropriate, describing alternate design and operating practices that will, in conjunction with location aspects, prevent the migration of any hazardous waste or hazardous constituents into the ground water or surface water during the life of the facility, or

(2) A detailed assessment of the substantial present or potential hazards posed to human health or the environment should a release enter the environment.

(i) Description of controls and practices to prevent spills and overflows, as required under Subsection R315-264-194(b); and

(j) For tank systems in which ignitable, reactive, or incompatible wastes are to be stored or treated, a description of how operating procedures and tank system and facility design will achieve compliance with the requirements of Sections R315-264-198 and 199.

(k) Information on air emission control equipment as required in Section R315-270-27.

R315-270-17. Hazardous Waste Permit Program -- Specific Part B Information Requirements for Surface Impoundments.

Except as otherwise provided in Section R315-264-1, owners and operators of facilities that store, treat or dispose of hazardous waste in surface impoundments shall provide the following additional information:

(a) A list of the hazardous wastes placed or to be placed in each surface impoundment;

(b) Detailed plans and an engineering report describing how the surface impoundment is designed and is or will be constructed, operated, and maintained to meet the requirements of Section R315-264-19 and Sections R315-264-221 through 223, addressing the following items:

(1) The liner system, except for an existing portion of a surface impoundment. If an exemption from the requirement for a liner is sought as provided by Subsection R315-264-221(b), submit detailed plans and engineering and hydrogeologic reports, as appropriate, describing alternate design and operating practices that will, in conjunction with location aspects, prevent the migration of any hazardous constituents into the ground water or surface water at any future time;

(2) The double liner and leak, leachate, detection, collection, and removal system, if the surface impoundment shall meet the requirements of Subsection R315-264-221(c). If an exemption from the requirements for double liners and a leak detection, collection, and removal system or alternative design is sought as provided by Subsections R315-264-221(d), (e), or (f), submit appropriate information;

(3) If the leak detection system is located in a saturated zone, submit detailed plans and an engineering report explaining the leak detection system design and operation, and the location of the saturated zone in relation to the leak detection system;

(4) The construction quality assurance (CQA) plan if required under Section R315-264-19;

(5) Proposed action leakage rate, with rationale, if required under Section R315-264-222, and response action plan, if required under Section R315-264-223;

(6) Prevention of overtopping; and

(7) Structural integrity of dikes;

(c) A description of how each surface impoundment, including the double liner system, leak detection system, cover system, and appurtenances for control of overtopping, will be inspected in order to meet the requirements of Subsections R315-264-226(a), (b), and (d). This information shall be included in the inspection plan submitted under Subsection R315-270-14(b)(5);

(d) A certification by a qualified engineer which attests to the structural integrity of each dike, as required under Subsection R315-264-226(c). For new units, the owner or operator shall submit a statement by a qualified engineer that he will provide such a certification upon completion of construction in accordance with the plans and specifications;

(e) A description of the procedure to be used for removing a surface impoundment from service, as required under Subsections R315-264-227(b) and (c). This information should be included in the contingency plan submitted under Subsection R315-270-14(b)(7);

(f) A description of how hazardous waste residues and contaminated materials will be removed from the unit at closure, as required under Subsection R315-264-228(a)(1). For any wastes not to be removed from the unit upon closure, the owner or operator shall submit detailed plans and an engineering report describing how Subsections R315-264-228(a)(2) and (b) will be complied with. This information should be included in the closure plan and, where applicable, the post-closure plan submitted under Subsection R315-270-14(b)(13);

(g) If ignitable or reactive wastes are to be placed in a surface impoundment, an explanation of how Section R315-264-229 will be complied with;

(h) If incompatible wastes, or incompatible wastes and materials will be placed in a surface impoundment, an explanation of how Section R315-264-230 will be complied with.

(i) A waste management plan for EPA Hazardous Waste Nos. FO20, FO21, FO22, FO23, FO26, and FO27 describing how the surface impoundment is or will be designed, constructed, operated, and maintained to meet the requirements of Section R315-264-231. This submission shall address the following items as specified in Section R315-264-231:

(1) The volume, physical, and chemical characteristics of the wastes, including their potential to migrate through soil or to volatilize or escape into the atmosphere;

(2) The attenuative properties of underlying and surrounding soils or other materials;

(3) The mobilizing properties of other materials co-disposed with these wastes; and

(4) The effectiveness of additional treatment, design, or monitoring techniques.

(j) Information on air emission control equipment as required in Section R315-270-27.

R315-270-18. Hazardous Waste Permit Program -- Specific Part B Information Requirements for Waste Piles.

Except as otherwise provided in Section R315-264-1, owners and operators of facilities that store or treat hazardous waste in waste piles shall provide the following additional information:

(a) A list of hazardous wastes placed or to be placed in each waste pile;

(b) If an exemption is sought to Section R315-264-251 and Sections R315-264-90 through 101 as provided by Subsection R315-264-250(c) or Subsection R315-264-90(b)(2), an explanation of how the standards of Subsection R315-264-250(c) will be complied with or detailed plans and an engineering report describing how the requirements of Subsection R315-264-90(b)(2) will be met.

(c) Detailed plans and an engineering report describing how the waste pile is designed and is or will be constructed, operated, and maintained to meet the requirements of Sections R315-264-19 and R315-264-251 through 253, addressing the following items:

(1)(i) The liner system, except for an existing portion of a waste pile, if the waste pile shall meet the requirements of Subsection R315-264-251(a). If an exemption from the requirement for a liner is sought as provided by Subsection R315-264-251(b), submit detailed plans, and engineering and hydrogeological reports, as appropriate, describing alternate designs and operating practices that will, in conjunction with location aspects, prevent the migration of any hazardous constituents into the ground water or surface water at any future time;

(ii) The double liner and leak, leachate, detection; collection; and removal system, if the waste pile shall meet the requirements of Subsection R315-264-251(c). If an exemption from the requirements for double liners and a leak detection, collection, and removal system or alternative design is sought as provided by Subsections R315-264-251(d), (e), or (f), submit appropriate information;

(iii) If the leak detection system is located in a saturated zone, submit detailed plans and an engineering report explaining the leak detection system design and operation, and the location of the saturated zone in relation to the leak detection system;

(iv) The construction quality assurance (CQA) plan if required under Section R315-264-19;

(v) Proposed action leakage rate, with rationale, if required under Section R315-264-252, and response action plan, if required under Section R315-264-253;

(2) Control of run-on;

(3) Control of run-off;

(4) Management of collection and holding units associated with run-on and run-off control systems; and

(5) Control of wind dispersal of particulate matter, where applicable;

(d) A description of how each waste pile, including the double liner system, leachate collection and removal system, leak detection system, cover system, and appurtenances for control of run-on and run-off, will be inspected in order to meet the requirements of Subsections R315-264-254(a), (b), and (c). This information shall be included in the inspection plan submitted under Subsection R315-270-14(b)(5);

(e) If treatment is carried out on or in the pile, details of

the process and equipment used, and the nature and quality of the residuals;

(f) If ignitable or reactive wastes are to be placed in a waste pile, an explanation of how the requirements of Section R315-264-256 will be complied with;

(g) If incompatible wastes, or incompatible wastes and materials will be placed in a waste pile, an explanation of how Section R315-264-257 will be complied with;

(h) A description of how hazardous waste residues and contaminated materials will be removed from the waste pile at closure, as required under Subsection R315-264-258(a). For any waste not to be removed from the waste pile upon closure, the owner or operator shall submit detailed plans and an engineering report describing how Subsections R315-264-310(a) and (b) will be complied with. This information should be included in the closure plan and, where applicable, the post-closure plan submitted under Subsection R315-270-14(b)(13).

(i) A waste management plan for EPA Hazardous Waste Nos. FO20, FO21, FO22, FO23, FO26, and FO27 describing how a waste pile that is not enclosed, as defined in Section R315-264-250(c), is or will be designed, constructed, operated, and maintained to meet the requirements of Section R315-264-259. This submission shall address the following items as specified in Section R315-264-259:

(1) The volume, physical, and chemical characteristics of the wastes to be disposed in the waste pile, including their potential to migrate through soil or to volatilize or escape into the atmosphere;

(2) The attenuative properties of underlying and surrounding soils or other materials;

(3) The mobilizing properties of other materials co-disposed with these wastes; and

(4) The effectiveness of additional treatment, design, or monitoring techniques.

R315-270-19. Hazardous Waste Permit Program -- Specific Part B Information Requirements for Incinerators.

Except as Subsection R315-264-340 and Subsection R315-270-19(e) provide otherwise, owners and operators of facilities that incinerate hazardous waste shall fulfill the requirements of Subsection R315-270-19(a), (b), or (c).

(a) When seeking an exemption under Subsection R315-264-340 (b) or (c), Ignitable, corrosive, or reactive wastes only:

(1) Documentation that the waste is listed as a hazardous waste in Sections R315-261-30 through 35 solely because it is ignitable, Hazard Code I, or corrosive, Hazard Code C, or both; or

(2) Documentation that the waste is listed as a hazardous waste in Sections R315-261-30 through 35 solely because it is reactive, Hazard Code R, for characteristics other than those listed in Subsection R315-261-23(a)(4) and (5), and will not be burned when other hazardous wastes are present in the combustion zone; or

(3) Documentation that the waste is a hazardous waste solely because it possesses the characteristic of ignitability, corrosivity, or both, as determined by the tests for characteristics of hazardous waste under Sections R315-261-20 through 24; or

(4) Documentation that the waste is a hazardous waste solely because it possesses the reactivity characteristics listed in Subsections R315-261-23(a)(1), (2), (3), (6), (7), or (8), and that it will not be burned when other hazardous wastes are present in the combustion zone; or

(b) Submit a trial burn plan or the results of a trial burn, including all required determinations, in accordance with Section R315-270-62; or

(c) In lieu of a trial burn, the applicant may submit the following information:

(1) An analysis of each waste or mixture of wastes to be burned including:

(i) Heat value of the waste in the form and composition in which it will be burned.

(ii) Viscosity, if applicable, or description of physical form of the waste.

(iii) An identification of any hazardous organic constituents listed in Rule R315-261, appendix VIII, which are present in the waste to be burned, except that the applicant need not analyze for constituents listed in Rule R315-261, appendix VIII, which would reasonably not be expected to be found in the waste. The constituents excluded from analysis shall be identified and the basis for their exclusion stated. The waste analysis shall rely on appropriate analytical techniques.

(iv) An approximate quantification of the hazardous constituents identified in the waste, within the precision produced by appropriate analytical methods.

(v) A quantification of those hazardous constituents in the waste which may be designated as POHC's based on data submitted from other trial or operational burns which demonstrate compliance with the performance standards in Section R315-264-343.

(2) A detailed engineering description of the incinerator, including:

(i) Manufacturer's name and model number of incinerator.

(ii) Type of incinerator.

(iii) Linear dimension of incinerator unit including cross sectional area of combustion chamber.

(iv) Description of auxiliary fuel system, type/feed.

(v) Capacity of prime mover.

(vi) Description of automatic waste feed cutoff system(s).

(vii) Stack gas monitoring and pollution control monitoring system.

(viii) Nozzle and burner design.

(ix) Construction materials.

(x) Location and description of temperature, pressure, and flow indicating devices and control devices.

(3) A description and analysis of the waste to be burned compared with the waste for which data from operational or trial burns are provided to support the contention that a trial burn is not needed. The data should include those items listed in Subsection R315-270-19(c)(1). This analysis should specify the POHC's which the applicant has identified in the waste for which a permit is sought, and any differences from the POHC's in the waste for which burn data are provided.

(4) The design and operating conditions of the incinerator unit to be used, compared with that for which comparative burn data are available.

(5) A description of the results submitted from any previously conducted trial burn(s) including:

(i) Sampling and analysis techniques used to calculate performance standards in Section R315-264-343,

(ii) Methods and results of monitoring temperatures, waste feed rates, carbon monoxide, and an appropriate indicator of combustion gas velocity, including a statement concerning the precision and accuracy of this measurement,

(6) The expected incinerator operation information to demonstrate compliance with Sections R315-264-343 and 345 including:

(i) Expected carbon monoxide (CO) level in the stack exhaust gas.

(ii) Waste feed rate.

(iii) Combustion zone temperature.

(iv) Indication of combustion gas velocity.

(v) Expected stack gas volume, flow rate, and temperature.

(vi) Computed residence time for waste in the combustion zone.

(vii) Expected hydrochloric acid removal efficiency.

(viii) Expected fugitive emissions and their control procedures.

(ix) Proposed waste feed cut-off limits based on the

identified significant operating parameters.

(7) Such supplemental information as the Director finds necessary to achieve the purposes of Subsection R315-270-19(c).

(8) Waste analysis data, including that submitted in Subsection R315-270-19(c)(1), sufficient to allow the Director to specify as permit Principal Organic Hazardous Constituents, permit POHC's, those constituents for which destruction and removal efficiencies will be required.

(d) The Director shall approve a permit application without a trial burn if he finds that:

(1) The wastes are sufficiently similar; and

(2) The incinerator units are sufficiently similar, and the data from other trial burns are adequate to specify, under Section R315-264-345, operating conditions that will ensure that the performance standards in Section R315-264-343 shall be met by the incinerator.

(e) When an owner or operator of a hazardous waste incineration unit becomes subject to permit requirements after October 12, 2005, or when an owner or operator of an existing hazardous waste incineration unit demonstrates compliance with the air emission standards and limitations in Subsection R307-214-2(39) which incorporates 40 CFR part 63, subpart EEE, i.e., by conducting a comprehensive performance test and submitting a Notification of Compliance under 40 CFR 63.1207(j) and 63.1210(d) documenting compliance with all applicable requirements of Subsection R307-214-2(39) which incorporates 40 CFR part 63, subpart EEE, the requirements of Section R315-270-19 do not apply, except those provisions the Director determines are necessary to ensure compliance with Subsections R315-264-345(a) and (c) if the owner or operator elect to comply with Subsection R315-270-235(a)(1)(i) to minimize emissions of toxic compounds from startup, shutdown, and malfunction events. Nevertheless, the Director may apply the provisions of Section R315-270-19, on a case-by-case basis, for purposes of information collection in accordance with Subsections R315-270-10(k) and (l), R315-270-32(b)(2), and (b)(3).

R315-270-20. Hazardous Waste Permit Program -- Specific Part B Information Requirements for Land Treatment Facilities.

Except as otherwise provided in Section R315-264-1, owners and operators of facilities that use land treatment to dispose of hazardous waste shall provide the following additional information:

(a) A description of plans to conduct a treatment demonstration as required under Section R315-264-272. The description shall include the following information;

(1) The wastes for which the demonstration will be made and the potential hazardous constituents in the waste;

(2) The data sources to be used to make the demonstration, e.g., literature, laboratory data, field data, or operating data;

(3) Any specific laboratory or field test that will be conducted, including:

(i) The type of test, e.g., column leaching, degradation;

(ii) Materials and methods, including analytical procedures;

(iii) Expected time for completion;

(iv) Characteristics of the unit that will be simulated in the demonstration, including treatment zone characteristics, climatic conditions, and operating practices.

(b) A description of a land treatment program, as required under Section R315-264-271. This information shall be submitted with the plans for the treatment demonstration, and updated following the treatment demonstration. The land treatment program shall address the following items:

(1) The wastes to be land treated;

(2) Design measures and operating practices necessary to

maximize treatment in accordance with Subsection R315-264-273(a) including:

(i) Waste application method and rate;

(ii) Measures to control soil pH;

(iii) Enhancement of microbial or chemical reactions;

(iv) Control of moisture content;

(3) Provisions for unsaturated zone monitoring, including:

(i) Sampling equipment, procedures, and frequency;

(ii) Procedures for selecting sampling locations;

(iii) Analytical procedures;

(iv) Chain of custody control;

(v) Procedures for establishing background values;

(vi) Statistical methods for interpreting results;

(vii) The justification for any hazardous constituents recommended for selection as principal hazardous constituents, in accordance with the criteria for such selection in Subsection R315-264-278(a);

(4) A list of hazardous constituents reasonably expected to be in, or derived from, the wastes to be land treated based on waste analysis performed pursuant to Section R315-264-13;

(5) The proposed dimensions of the treatment zone;

(c) A description of how the unit is or will be designed, constructed, operated, and maintained in order to meet the requirements of Section R315-264-273. This submission shall address the following items:

(1) Control of run-on;

(2) Collection and control of run-off;

(3) Minimization of run-off of hazardous constituents from the treatment zone;

(4) Management of collection and holding facilities associated with run-on and run-off control systems;

(5) Periodic inspection of the unit. This information should be included in the inspection plan submitted under Subsection R315-270-14(b)(5);

(6) Control of wind dispersal of particulate matter, if applicable;

(d) If food-chain crops are to be grown in or on the treatment zone of the land treatment unit, a description of how the demonstration required under Subsection R315-264-276(a) will be conducted including:

(1) Characteristics of the food-chain crop for which the demonstration will be made.

(2) Characteristics of the waste, treatment zone, and waste application method and rate to be used in the demonstration;

(3) Procedures for crop growth, sample collection, sample analysis, and data evaluation;

(4) Characteristics of the comparison crop including the location and conditions under which it was or will be grown;

(e) If food-chain crops are to be grown, and cadmium is present in the land-treated waste, a description of how the requirements of Subsection R315-264-276(b) will be complied with;

(f) A description of the vegetative cover to be applied to closed portions of the facility, and a plan for maintaining such cover during the post-closure care period, as required under Subsections R315-264-280(a)(8) and R315-264-280(c)(2). This information should be included in the closure plan and, where applicable, the post-closure care plan submitted under Subsection R315-270-14(b)(13);

(g) If ignitable or reactive wastes will be placed in or on the treatment zone, an explanation of how the requirements of Section R315-264-281 will be complied with;

(h) If incompatible wastes, or incompatible wastes and materials, will be placed in or on the same treatment zone, an explanation of how Section R315-264-282 will be complied with.

(i) A waste management plan for EPA Hazardous Waste Nos. FO20, FO21, FO22, FO23, FO26, and FO27 describing how a land treatment facility is or will be designed, constructed,

operated, and maintained to meet the requirements of Section R315-264-283. This submission shall address the following items as specified in Section R315-264-283:

- (1) The volume, physical, and chemical characteristics of the wastes, including their potential to migrate through soil or to volatilize or escape into the atmosphere;
- (2) The attenuative properties of underlying and surrounding soils or other materials;
- (3) The mobilizing properties of other materials co-disposed with these wastes; and
- (4) The effectiveness of additional treatment, design, or monitoring techniques.

R315-270-21. Hazardous Waste Permit Program -- Specific Part B Information Requirements for Landfills.

Except as otherwise provided in Section R315-264-1, owners and operators of facilities that dispose of hazardous waste in landfills shall provide the following additional information:

- (a) A list of the hazardous wastes placed or to be placed in each landfill or landfill cell;
- (b) Detailed plans and an engineering report describing how the landfill is designed and is or will be constructed, operated, and maintained to meet the requirements of Sections R315-264-19 and Sections R315-264-301 through 303, addressing the following items:

(1)(i) The liner system, except for an existing portion of a landfill, if the landfill shall meet the requirements of Subsection R315-264-301(a). If an exemption from the requirement for a liner is sought as provided by Subsection R315-264-301(b), submit detailed plans, and engineering and hydrogeological reports, as appropriate, describing alternate designs and operating practices that shall, in conjunction with location aspects, prevent the migration of any hazardous constituents into the ground water or surface water at any future time;

(ii) The double liner and leak, leachate; detection; collection; and removal system; if the landfill shall meet the requirements of Subsection R315-264-301(c). If an exemption from the requirements for double liners and a leak detection, collection, and removal system or alternative design is sought as provided by Subsection R315-264-301(d), (e), or (f), submit appropriate information;

(iii) If the leak detection system is located in a saturated zone, submit detailed plans and an engineering report explaining the leak detection system design and operation, and the location of the saturated zone in relation to the leak detection system;

(iv) The construction quality assurance (CQA) plan if required under Section R315-264-19;

(v) Proposed action leakage rate, with rationale, if required under Section R315-264-302, and response action plan, if required under Section R315-264-303;

- (2) Control of run-on;
- (3) Control of run-off;
- (4) Management of collection and holding facilities associated with run-on and run-off control systems; and
- (5) Control of wind dispersal of particulate matter, where applicable;

(c) A description of how each landfill, including the double liner system, leachate collection and removal system, leak detection system, cover system, and appurtenances for control of run-on and run-off, will be inspected in order to meet the requirements of Subsections R315-264-303(a), (b), and (c). This information shall be included in the inspection plan submitted under Subsection R315-270-14(b)(5);

(d) A description of how each landfill, including the liner and cover systems, will be inspected in order to meet the requirements of Subsections R315-264-303(a) and (b). This information should be included in the inspection plan submitted under Subsection R315-270-14(b)(5).

(e) Detailed plans and an engineering report describing the final cover which will be applied to each landfill or landfill cell at closure in accordance with Subsection R315-264-310(a), and a description of how each landfill will be maintained and monitored after closure in accordance with Subsection R315-264-310(b). This information should be included in the closure and post-closure plans submitted under Subsection R315-270-14(b)(13).

(f) If ignitable or reactive wastes will be landfilled, an explanation of how the standards of Section R315-264-312 will be complied with;

(g) If incompatible wastes, or incompatible wastes and materials will be landfilled, an explanation of how Section R315-264-313 will be complied with;

(h) If bulk or non-containerized liquid waste or wastes containing free liquids is to be landfilled prior to May 8, 1985, an explanation of how the requirements of Subsection R315-264-314(a) will be complied with;

(i) If containers of hazardous waste are to be landfilled, an explanation of how the requirements of Section R315-264-315 or Section R315-264-316, as applicable, will be complied with.

(j) A waste management plan for EPA Hazardous Waste Nos. FO20, FO21, FO22, FO23, FO26, and FO27 describing how a landfill is or will be designed, constructed, operated, and maintained to meet the requirements of Section R315-264-317. This submission shall address the following items as specified in Section R315-264-317:

(1) The volume, physical, and chemical characteristics of the wastes, including their potential to migrate through soil or to volatilize or escape into the atmosphere;

(2) The attenuative properties of underlying and surrounding soils or other materials;

(3) The mobilizing properties of other materials co-disposed with these wastes; and

(4) The effectiveness of additional treatment, design, or monitoring techniques.

R315-270-22. Hazardous Waste Permit Program Specific Part B Information Requirements for Boilers and Industrial Furnaces Burning Hazardous Waste.

When an owner or operator of a cement kiln, lightweight aggregate kiln, solid fuel boiler, liquid fuel boiler, or hydrochloric acid production furnace becomes subject to Section 19-6-108 permit requirements after October 12, 2005, or when an owner or operator of an existing cement kiln, lightweight aggregate kiln, solid fuel boiler, liquid fuel boiler, or hydrochloric acid production furnace demonstrates compliance with the air emission standards and limitations in 40 CFR 63, subpart EEE, i.e., by conducting a comprehensive performance test and submitting a Notification of Compliance under 40 CFR 63.1207(j) and 63.1210(d) documenting compliance with all applicable requirements of Subsection R307-214-2(39) which incorporates 40 CFR part 63, subpart EEE, the requirements of Section R315-270-22 do not apply. The requirements of Section R315-270-22 do apply, however, if the Director determines certain provisions are necessary to ensure compliance with Subsections R315-266-102(e)(1) and (e)(2)(iii) if the owner or operator elects to comply with Subsection R315-270-235(a)(1)(i) to minimize emissions of toxic compounds from startup, shutdown, and malfunction events; or if the facility is an area source and the owner or operator elects to comply with the Sections R315-266-105 through 107 standards and associated requirements for particulate matter, hydrogen chloride and chlorine gas, and non-mercury metals; or the Director determines certain provisions apply, on a case-by-case basis, for purposes of information collection in accordance with Subsections R315-270-10(k), R315-270-10(l), and Subsections R315-270-32(b)(2), and 32(b)(3).

(a) Trial burns

(1) General. Except as provided below, owners and operators that are subject to the standards to control organic emissions provided by Section R315-266-104, standards to control particulate matter provided by Section R315-266-105, standards to control metals emissions provided by Section R315-266-106, or standards to control hydrogen chloride or chlorine gas emissions provided by Section R315-266-107 shall conduct a trial burn to demonstrate conformance with those standards and shall submit a trial burn plan or the results of a trial burn, including all required determinations, in accordance with Section R315-270-66.

(i) A trial burn to demonstrate conformance with a particular emission standard may be waived under provisions of Sections R315-266-104 through 107 and Subsections R315-270-22(a)(2) through (a)(5); and

(ii) The owner or operator may submit data in lieu of a trial burn, as prescribed in Subsection R315-270-22 (a)(6).

(2) Waiver of trial burn for DRE

(i) Boilers operated under special operating requirements. When seeking to be permitted under Subsections R315-266-104(a)(4) and R315-266-110 that automatically waive the DRE trial burn, the owner or operator of a boiler shall submit documentation that the boiler operates under the special operating requirements provided by Section R315-266-110.

(ii) Boilers and industrial furnaces burning low risk waste. When seeking to be permitted under the provisions for low risk waste provided by Subsections R315-266-104(a)(5) and R315-266-109(a) that waive the DRE trial burn, the owner or operator shall submit:

(A) Documentation that the device is operated in conformance with the requirements of Subsection R315-266-109(a)(1).

(B) Results of analyses of each waste to be burned, documenting the concentrations of nonmetal compounds listed in appendix VIII of Rule R315-261, except for those constituents that would reasonably not be expected to be in the waste. The constituents excluded from analysis shall be identified and the basis for their exclusion explained. The analysis shall rely on appropriate analytical techniques.

(C) Documentation of hazardous waste firing rates and calculations of reasonable, worst-case emission rates of each constituent identified in Subsection R315-270-22(a)(2)(ii)(B) using procedures provided by Subsection R315-266-109(a)(2)(ii).

(D) Results of emissions dispersion modeling for emissions identified in Subsection R315-270-22(a)(2)(ii)(C) using modeling procedures prescribed by Subsection R315-266-106(h). The Director shall review the emission modeling conducted by the applicant to determine conformance with these procedures. The Director shall either approve the modeling or determine that alternate or supplementary modeling is appropriate.

(E) Documentation that the maximum annual average ground level concentration of each constituent identified in Subsection R315-270-22(a)(2)(ii)(B) quantified in conformance with Subsection R315-270-22(a)(2)(ii)(D) does not exceed the allowable ambient level established in appendices IV or V of Rule R315-266. The acceptable ambient concentration for emitted constituents for which a specific Reference Air Concentration has not been established in appendix IV or Risk-Specific Dose has not been established in appendix V is 0.1 micrograms per cubic meter, as noted in the footnote to appendix IV.

(3) Waiver of trial burn for metals. When seeking to be permitted under the Tier I, or adjusted Tier I, metals feed rate screening limits provided by Subsections R315-266-106 (b) and (e) that control metals emissions without requiring a trial burn, the owner or operator shall submit:

(i) Documentation of the feed rate of hazardous waste, other fuels, and industrial furnace feed stocks;

(ii) Documentation of the concentration of each metal controlled by Subsection R315-266-106(b) or (e) in the hazardous waste, other fuels, and industrial furnace feedstocks, and calculations of the total feed rate of each metal;

(iii) Documentation of how the applicant shall ensure that the Tier I feed rate screening limits provided by Subsection R315-266-106(b) or (e) shall not be exceeded during the averaging period provided by Subsection R315-266-106(b) or (e);

(iv) Documentation to support the determination of the terrain-adjusted effective stack height, good engineering practice stack height, terrain type, and land use as provided by Subsections R315-266-106(b)(3) through (b)(5);

(v) Documentation of compliance with the provisions of Subsection R315-266-106(b)(6), if applicable, for facilities with multiple stacks;

(vi) Documentation that the facility does not fail the criteria provided by Subsection R315-266-106(b)(7) for eligibility to comply with the screening limits; and

(vii) Proposed sampling and metals analysis plan for the hazardous waste, other fuels, and industrial furnace feed stocks.

(4) Waiver of trial burn for particulate matter. When seeking to be permitted under the low risk waste provisions of Subsection R315-266-109(b) which waives the particulate standard, and trial burn to demonstrate conformance with the particulate standard, applicants shall submit documentation supporting conformance with Subsections R315-270-22(a)(2)(ii) and (a)(3).

(5) Waiver of trial burn for HCl and Cl₂. When seeking to be permitted under the Tier I, or adjusted Tier I, feed rate screening limits for total chloride and chlorine provided by Subsections R315-266-107(b)(1) and (e) that control emissions of hydrogen chloride (HCl) and chlorine gas (Cl₂) without requiring a trial burn, the owner or operator shall submit:

(i) Documentation of the feed rate of hazardous waste, other fuels, and industrial furnace feed stocks;

(ii) Documentation of the levels of total chloride and chlorine in the hazardous waste, other fuels, and industrial furnace feedstocks, and calculations of the total feed rate of total chloride and chlorine;

(iii) Documentation of how the applicant shall ensure that the Tier I, or adjusted Tier I, feed rate screening limits provided by Subsection R315-266-107(b)(1) or (e) shall not be exceeded during the averaging period provided by Subsection R315-266-107(b)(1) or (e);

(iv) Documentation to support the determination of the terrain-adjusted effective stack height, good engineering practice stack height, terrain type, and land use as provided by Subsection R315-266-107(b)(3);

(v) Documentation of compliance with the provisions of Subsection R315-266-107(b)(4), if applicable, for facilities with multiple stacks;

(vi) Documentation that the facility does not fail the criteria provided by Subsection R315-266-107(b)(3) for eligibility to comply with the screening limits; and

(vii) Proposed sampling and analysis plan for total chloride and chlorine for the hazardous waste, other fuels, and industrial furnace feedstocks.

(6) Data in lieu of trial burn. The owner or operator may seek an exemption from the trial burn requirements to demonstrate conformance with Sections R315-266-104 through 107 and Section R315-270-66 by providing the information required by Section R315-270-66 from previous compliance testing of the device in conformance with Subsection R315-266-103, or from compliance testing or trial or operational burns of similar boilers or industrial furnaces burning similar hazardous wastes under similar conditions. If data from a similar device

is used to support a trial burn waiver, the design and operating information required by Section R315-270-66 shall be provided for both the similar device and the device to which the data is to be applied, and a comparison of the design and operating information shall be provided. The Director shall approve a permit application without a trial burn if he finds that the hazardous wastes are sufficiently similar, the devices are sufficiently similar, the operating conditions are sufficiently similar, and the data from other compliance tests, trial burns, or operational burns are adequate to specify, under Section R315-266-102, operating conditions that shall ensure conformance with Subsection R315-266-102(c). In addition, the following information shall be submitted:

(i) For a waiver from any trial burn:

(A) A description and analysis of the hazardous waste to be burned compared with the hazardous waste for which data from compliance testing, or operational or trial burns are provided to support the contention that a trial burn is not needed;

(B) The design and operating conditions of the boiler or industrial furnace to be used, compared with that for which comparative burn data are available; and

(C) Such supplemental information as the Director finds necessary to achieve the purposes of Subsection R315-270-22(a).

(ii) For a waiver of the DRE trial burn, the basis for selection of POHCs used in the other trial or operational burns which demonstrate compliance with the DRE performance standard in Subsection R315-266-104(a). This analysis should specify the constituents in appendix VIII, Rule R315-261, that the applicant has identified in the hazardous waste for which a permit is sought, and any differences from the POHCs in the hazardous waste for which burn data are provided.

(b) Alternative HC limit for industrial furnaces with organic matter in raw materials. Owners and operators of industrial furnaces requesting an alternative HC limit under Subsection R315-266-104(f) shall submit the following information at a minimum:

(1) Documentation that the furnace is designed and operated to minimize HC emissions from fuels and raw materials;

(2) Documentation of the proposed baseline flue gas HC, and CO, concentration, including data on HC, and CO, levels during tests when the facility produced normal products under normal operating conditions from normal raw materials while burning normal fuels and when not burning hazardous waste;

(3) Test burn protocol to confirm the baseline HC, and CO, level including information on the type and flow rate of all feedstreams, point of introduction of all feedstreams, total organic carbon content, or other appropriate measure of organic content, of all nonfuel feedstreams, and operating conditions that affect combustion of fuel(s) and destruction of hydrocarbon emissions from nonfuel sources;

(4) Trial burn plan to:

(i) Demonstrate that flue gas HC, and CO, concentrations when burning hazardous waste do not exceed the baseline HC, and CO, level; and

(ii) Identify the types and concentrations of organic compounds listed in appendix VIII, Rule R315-261, that are emitted when burning hazardous waste in conformance with procedures prescribed by the Director;

(5) Implementation plan to monitor over time changes in the operation of the facility that could reduce the baseline HC level and procedures to periodically confirm the baseline HC level; and

(6) Such other information as the Director finds necessary to achieve the purposes of Subsection R315-270-22(b).

(c) Alternative metals implementation approach. When seeking to be permitted under an alternative metals

implementation approach under Subsection R315-266-106(f), the owner or operator shall submit documentation specifying how the approach ensures compliance with the metals emissions standards of Subsection R315-266-106(c) or (d) and how the approach can be effectively implemented and monitored. Further, the owner or operator shall provide such other information that the Director finds necessary to achieve the purposes of Subsection R315-270-22(b).

(d) Automatic waste feed cutoff system. Owners and operators shall submit information describing the automatic waste feed cutoff system, including any pre-alarm systems that may be used.

(e) Direct transfer. Owners and operators that use direct transfer operations to feed hazardous waste from transport vehicles, containers, as defined in Section R315-266-111, directly to the boiler or industrial furnace shall submit information supporting conformance with the standards for direct transfer provided by Section R315-266-111.

(f) Residues. Owners and operators that claim that their residues are excluded from regulation under the provisions of Section R315-266-112 shall submit information adequate to demonstrate conformance with those provisions.

R315-270-23. Hazardous Waste Permit Program -- Specific Part B Information Requirements for Miscellaneous Units.

Except as otherwise provided in Section R315-264-600, owners and operators of facilities that treat, store, or dispose of hazardous waste in miscellaneous units shall provide the following additional information:

(a) A detailed description of the unit being used or proposed for use, including the following:

(1) Physical characteristics, materials of construction, and dimensions of the unit;

(2) Detailed plans and engineering reports describing how the unit will be located, designed, constructed, operated, maintained, monitored, inspected, and closed to comply with the requirements of Sections R315-264-601 and 602; and

(3) For disposal units, a detailed description of the plans to comply with the post-closure requirements of Section R315-264-603.

(b) Detailed hydrologic, geologic, and meteorologic assessments and land-use maps for the region surrounding the site that address and ensure compliance of the unit with each factor in the environmental performance standards of Section R315-264-601. If the applicant can demonstrate that he does not violate the environmental performance standards of Section R315-264-601 and the Director agrees with such demonstration, preliminary hydrologic, geologic, and meteorologic assessments will suffice.

(c) Information on the potential pathways of exposure of humans or environmental receptors to hazardous waste or hazardous constituents and on the potential magnitude and nature of such exposures.

(d) For any treatment unit, a report on a demonstration of the effectiveness of the treatment based on laboratory or field data.

(e) Any additional information determined by the Director to be necessary for evaluation of compliance of the unit with the environmental performance standards of Section R315-264-601.

R315-270-24. Hazardous Waste Permit Program -- Specific Part B Information Requirements for Process Vents.

Except as otherwise provided in Section R315-264-1, owners and operators of facilities that have process vents to which Sections R315-264-1030 through 1036 applies shall provide the following additional information:

(a) For facilities that cannot install a closed-vent system and control device to comply with the provisions of Sections R315-264-1030 through 1036 on the effective date that the

facility becomes subject to the provisions of Sections R315-264-1030 through 1036 or 40 CFR 265.1030 through 1035, which are adopted by reference, an implementation schedule as specified in Subsection R315-264-1033(a)(2).

(b) Documentation of compliance with the process vent standards in Section R315-264-1032, including:

(1) Information and data identifying all affected process vents, annual throughput and operating hours of each affected unit, estimated emission rates for each affected vent and for the overall facility, i.e., the total emissions for all affected vents at the facility, and the approximate location within the facility of each affected unit, e.g., identify the hazardous waste management units on a facility plot plan.

(2) Information and data supporting estimates of vent emissions and emission reduction achieved by add-on control devices based on engineering calculations or source tests. For the purpose of determining compliance, estimates of vent emissions and emission reductions shall be made using operating parameter values, e.g., temperatures, flow rates, or concentrations, that represent the conditions that exist when the waste management unit is operating at the highest load or capacity level reasonably expected to occur.

(3) Information and data used to determine whether or not a process vent is subject to the requirements of Section R315-264-1032.

(c) Where an owner or operator applies for permission to use a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system to comply with the requirements of Section R315-264-1032, and chooses to use test data to determine the organic removal efficiency or the total organic compound concentration achieved by the control device, a performance test plan as specified in Subsection R315-264-1035(b)(3).

(d) Documentation of compliance with Section R315-264-1033, including:

(1) A list of all information references and sources used in preparing the documentation.

(2) Records, including the dates, of each compliance test required by Subsection R315-264-1033(k).

(3) A design analysis, specifications, drawings, schematics, and piping and instrumentation diagrams based on the appropriate sections of "APTI Course 415: Control of Gaseous Emissions" or other engineering texts acceptable to the Director that present basic control device information. The design analysis shall address the vent stream characteristics and control device operation parameters as specified in Subsection R315-264-1035(b)(4)(iii).

(4) A statement signed and dated by the owner or operator certifying that the operating parameters used in the design analysis reasonably represent the conditions that exist when the hazardous waste management unit is or would be operating at the highest load or capacity level reasonably expected to occur.

(5) A statement signed and dated by the owner or operator certifying that the control device is designed to operate at an efficiency of 95 weight percent or greater unless the total organic emission limits of Subsection R315-264-1032(a) for affected process vents at the facility can be attained by a control device involving vapor recovery at an efficiency less than 95 weight percent.

R315-270-25. Hazardous Waste Permit Program -- Specific Part B Information Requirements for Equipment.

Except as otherwise provided in Subsection R315-264-1, owners and operators of facilities that have equipment to which Sections R315-264-1050 through 1065 applies shall provide the following additional information:

(a) For each piece of equipment to which Sections R315-264-1050 through 1065 applies:

(1) Equipment identification number and hazardous waste management unit identification.

(2) Approximate locations within the facility, e.g., identify the hazardous waste management unit on a facility plot plan.

(3) Type of equipment, e.g., a pump or pipeline valve.

(4) Percent by weight total organics in the hazardous waste stream at the equipment.

(5) Hazardous waste state at the equipment, e.g., gas/vapor or liquid.

(6) Method of compliance with the standard, e.g., "monthly leak detection and repair" or "equipped with dual mechanical seals".

(b) For facilities that cannot install a closed-vent system and control device to comply with the provisions of Sections R315-264-1050 through 1065 on the effective date that the facility becomes subject to the provisions of Sections R315-264-1050 through 1065 or 40 CFR 265.1050 through 1064, which are adopted by reference, an implementation schedule as specified in Subsection R315-264-1033(a)(2).

(c) Where an owner or operator applies for permission to use a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system and chooses to use test data to determine the organic removal efficiency or the total organic compound concentration achieved by the control device, a performance test plan as specified in Subsection R315-264-1035(b)(3).

(d) Documentation that demonstrates compliance with the equipment standards in Sections R315-264-1052 through 1059. This documentation shall contain the records required under Section R315-264-1064. The Director may request further documentation before deciding if compliance has been demonstrated.

(e) Documentation to demonstrate compliance with Section R315-264-1060 shall include the following information:

(1) A list of all information references and sources used in preparing the documentation.

(2) Records, including the dates, of each compliance test required by Subsection R315-264-1033(j).

(3) A design analysis, specifications, drawings, schematics, and piping and instrumentation diagrams based on the appropriate sections of "APTI Course 415: Control of Gaseous Emissions" or other engineering texts acceptable to the Director that present basic control device information. The design analysis shall address the vent stream characteristics and control device operation parameters as specified in Subsection R315-264-1035(b)(4)(iii).

(4) A statement signed and dated by the owner or operator certifying that the operating parameters used in the design analysis reasonably represent the conditions that exist when the hazardous waste management unit is operating at the highest load or capacity level reasonably expected to occur.

(5) A statement signed and dated by the owner or operator certifying that the control device is designed to operate at an efficiency of 95 weight percent or greater.

R315-270-26. Hazardous Waste Permit Program -- Special Part B Information Requirements for Drip Pads.

Except as otherwise provided by Subsection R315-264-1, owners and operators of hazardous waste treatment, storage, or disposal facilities that collect, store, or treat hazardous waste on drip pads shall provide the following additional information:

(a) A list of hazardous wastes placed or to be placed on each drip pad.

(b) If an exemption is sought to Sections R315-264-90 through 101, as provided by Subsection R315-264-90, detailed plans and an engineering report describing how the requirements of Subsection R315-264-90(b)(2) shall be met.

(c) Detailed plans and an engineering report describing

how the drip pad is or will be designed, constructed, operated and maintained to meet the requirements of Section R315-264-573, including the as-built drawings and specifications. This submission shall address the following items as specified in Section R315-264-571:

- (1) The design characteristics of the drip pad;
- (2) The liner system;
- (3) The leakage detection system, including the leak detection system and how it is designed to detect the failure of the drip pad or the presence of any releases of hazardous waste or accumulated liquid at the earliest practicable time;
- (4) Practices designed to maintain drip pads;
- (5) The associated collection system;
- (6) Control of run-on to the drip pad;
- (7) Control of run-off from the drip pad;
- (8) The interval at which drippage and other materials will be removed from the associated collection system and a statement demonstrating that the interval will be sufficient to prevent overflow onto the drip pad;
- (9) Procedures for cleaning the drip pad at least once every seven days to ensure the removal of any accumulated residues of waste or other materials, including but not limited to rinsing, washing with detergents or other appropriate solvents, or steam cleaning and provisions for documenting the date, time, and cleaning procedure used each time the pad is cleaned.
- (10) Operating practices and procedures that will be followed to ensure that tracking of hazardous waste or waste constituents off the drip pad due to activities by personnel or equipment is minimized;
- (11) Procedures for ensuring that, after removal from the treatment vessel, treated wood from pressure and non-pressure processes is held on the drip pad until drippage has ceased, including recordkeeping practices;
- (12) Provisions for ensuring that collection and holding units associated with the run-on and run-off control systems are emptied or otherwise managed as soon as possible after storms to maintain design capacity of the system;
- (13) If treatment is carried out on the drip pad, details of the process equipment used, and the nature and quality of the residuals.
- (14) A description of how each drip pad, including appurtenances for control of run-on and run-off, will be inspected in order to meet the requirements of Section R315-264-573. This information should be included in the inspection plan submitted under Subsection R315-270-14(b)(5).
- (15) A certification signed by a qualified Professional Engineer, stating that the drip pad design meets the requirements of Subsection R315-264-573(a) through (f).
- (16) A description of how hazardous waste residues and contaminated materials will be removed from the drip pad at closure, as required under Subsection R315-264-575(a). For any waste not to be removed from the drip pad upon closure, the owner or operator shall submit detailed plans and an engineering report describing how Subsections R315-264-310 (a) and (b) will be complied with. This information should be included in the closure plan and, where applicable, the post-closure plan submitted under Subsection R315-270-14(b)(13).

R315-270-27. Hazardous Waste Permit Program -- Specific Part B Information Requirements for Air Emission Controls for Tanks, Surface Impoundments, and Containers.

(a) Except as otherwise provided in Section R315-264-1, owners and operators of tanks, surface impoundments, or containers that use air emission controls in accordance with the requirements of Sections R315-264-1080 through 1090, shall provide the following additional information:

- (1) Documentation for each floating roof cover installed on a tank subject to Subsection R315-264-1084(d)(1) or (d)(2) that includes information prepared by the owner or operator or

provided by the cover manufacturer or vendor describing the cover design, and certification by the owner or operator that the cover meets the applicable design specifications as listed in Subsection R315-264-1084(e)(1) or (f)(1).

(2) Identification of each container area subject to the requirements of Sections R315-264-1080 through 1090 and certification by the owner or operator that the requirements of Sections R315-270-10 through 29 are met.

(3) Documentation for each enclosure used to control air pollutant emissions from tanks or containers in accordance with the requirements of Subsection R315-264-1084(d)(5) or 1086(e)(1)(ii) that includes records for the most recent set of calculations and measurements performed by the owner or operator to verify that the enclosure meets the criteria of a permanent total enclosure as specified in "Procedure T-Criteria for and Verification of a Permanent or Temporary Total Enclosure" under 40 CFR 52.741, appendix B.

(4) Documentation for each floating membrane cover installed on a surface impoundment in accordance with the requirements of Subsection R315-264-1085(c) that includes information prepared by the owner or operator or provided by the cover manufacturer or vendor describing the cover design, and certification by the owner or operator that the cover meets the specifications listed in Subsection R315-264-1085(c)(1).

(5) Documentation for each closed-vent system and control device installed in accordance with the requirements of Section R315-264-1087 that includes design and performance information as specified in Subsections R315-270-24(c) and (d).

(6) An emission monitoring plan for both Method 21 in 40 CFR part 60, appendix A and control device monitoring methods. This plan shall include the following information: monitoring point(s), monitoring methods for control devices, monitoring frequency, procedures for documenting exceedances, and procedures for mitigating noncompliances.

(7) When an owner or operator of a facility subject to 40 CFR 265.1080 through 1090, which are adopted by reference, cannot comply with Sections R315-264-1080 through 1090 by the date of permit issuance, the schedule of implementation required under 40 CFR 265.1082, which is adopted by reference.

R315-270-28. Hazardous Waste Permit Program -- Part B Information Requirements for Post-Closure Permits.

For post-closure permits, the owner or operator is required to submit only the information specified in Subsections R315-270-14(b)(1), (4), (5), (6), (11), (13), (14), (16), (18) and (19), (c), and (d), unless the Director determines that additional information from Sections R315-270-14, 16, 17, 18, 20, or 21 is necessary. The owner or operator is required to submit the same information when an alternative authority is used in lieu of a post-closure permit as provided in Subsection R315-270-1(c)(7).

R315-270-29. Hazardous Waste Permit Program -- Permit Denial.

The Director may, pursuant to the procedures in Rule R315-124, deny the permit application either in its entirety or as to the active life of a hazardous waste management facility or unit only.

R315-270-30. Hazardous Waste Permit Program -- Conditions Applicable to All Permits.

The following conditions apply to all hazardous waste facility permits, and shall be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to these regulations shall be given in the permit.

- (a) Duty to comply. The permittee shall comply with all conditions of this permit, except that the permittee need not comply with the conditions of this permit to the extent and for

the duration such noncompliance is authorized in an emergency permit. (See Section R315-270-61). Any permit noncompliance, except under the terms of an emergency permit, constitutes a violation of Sections 19-6-101 through 125 and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

(b) Duty to reapply. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall apply for and obtain a new permit.

(c) Need to halt or reduce activity not a defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(d) In the event of noncompliance with the permit, the permittee shall take all reasonable steps to minimize releases to the environment, and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health or the environment.

(e) Proper operation and maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control, and related appurtenances, which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

(f) Permit actions. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

(g) Property rights. The permit does not convey any property rights of any sort, or any exclusive privilege.

(h) Duty to provide information. The permittee shall furnish to the Director, within a reasonable time, any relevant information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

(i) Inspection and entry. The permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law to:

(1) Enter at reasonable times upon the permittee's premises where a regulated facility or activity is located or conducted, or where records shall be kept under the conditions of this permit;

(2) Have access to and copy, at reasonable times, any records that shall be kept under the conditions of this permit;

(3) Inspect at reasonable times any facilities, equipment, including monitoring and control equipment; practices; or operations regulated or required under this permit; and

(4) Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by Sections 19-6-101 through 125, any substances or parameters at any location.

(j) Monitoring and records.

(1) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

(2) The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring

instrumentation, copies of all reports required by this permit, the certification required by Subsection R315-264-73(b)(9), and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report, certification, or application. This period may be extended by request of the Director at any time. The permittee shall maintain records from all ground-water monitoring wells and associated ground-water surface elevations, for the active life of the facility, and for disposal facilities for the post-closure care period as well.

(3) Records for monitoring information shall include:

(i) The date, exact place, and time of sampling or measurements;

(ii) The individual(s) who performed the sampling or measurements;

(iii) The date(s) analyses were performed;

(iv) The individual(s) who performed the analyses;

(v) The analytical techniques or methods used; and

(vi) The results of such analyses.

(k) Signatory requirements. All applications, reports, or information submitted to the Director shall be signed and certified. See Section R315-270-11.

(l) Reporting requirements

(1) Planned changes. The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility.

(2) Anticipated noncompliance. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. For a new facility, the permittee may not treat, store, or dispose of hazardous waste; and for a facility being modified, the permittee may not treat, store, or dispose of hazardous waste in the modified portion of the facility except as provided in Section R315-270-42, until:

(i) The permittee has submitted to the Director by certified mail or hand delivery a letter signed by the permittee and a registered professional engineer stating that the facility has been constructed or modified in compliance with the permit; and

(ii)(A) The Director has inspected the modified or newly constructed facility and finds it is in compliance with the conditions of the permit; or

(B) Within 15 days of the date of submission of the letter in Subsection R315-270-30(l)(2)(i), the permittee has not received notice from the Director of the Director's intent to inspect, prior inspection is waived and the permittee may commence treatment, storage, or disposal of hazardous waste.

(3) Transfers. This permit is not transferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under Sections 19-6-101 through 125. See Section R315-270-40.

(4) Monitoring reports. Monitoring results shall be reported at the intervals specified elsewhere in this permit.

(5) Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

(6) Twenty-four hour reporting.

(i) The permittee shall report any noncompliance which may endanger health or the environment orally within 24 hours from the time the permittee becomes aware of the circumstances, including:

(A) Information concerning release of any hazardous waste that may cause an endangerment to public drinking water supplies.

(B) Any information of a release or discharge of hazardous waste or of a fire or explosion from the HWM facility, which

could threaten the environment or human health outside the facility.

(ii) The description of the occurrence and its cause shall include:

(A) Name, address, and telephone number of the owner or operator;

(B) Name, address, and telephone number of the facility;

(C) Date, time, and type of incident;

(D) Name and quantity of material(s) involved;

(E) The extent of injuries, if any;

(F) An assessment of actual or potential hazards to the environment and human health outside the facility, where this is applicable; and

(G) Estimated quantity and disposition of recovered material that resulted from the incident.

(iii) A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. The Director may waive the five day written notice requirement in favor of a written report within 15 days.

(7) Manifest discrepancy report: If a significant discrepancy in a manifest is discovered, the permittee shall attempt to reconcile the discrepancy. If not resolved within 15 days, the permittee shall submit a letter report, including a copy of the manifest, to the Director. See Section R315-264-72.

(8) Unmanifested waste report: This report shall be submitted to the Director within 15 days of receipt of unmanifested waste. See Section R315-264-76

(9) Biennial report: A biennial report shall be submitted covering facility activities during odd numbered calendar years. See Section R315-264-75.

(10) Other noncompliance. The permittee shall report all instances of noncompliance not reported under Subsections R315-270-30(l)(4), (5), and (6), at the time monitoring reports are submitted. The reports shall contain the information listed in Subsections R315-270-30(l)(6).

(11) Other information. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information.

(m) Information repository. The Director may require the permittee to establish and maintain an information repository at any time, based on the factors set forth in Subsection R315-124-33(b). The information repository shall be governed by the provisions in Subsections R315-124-124-33(c) through (f).

R315-270-31. Hazardous Waste Permit Program -- Requirements for Recording and Reporting of Monitoring Results.

All permits shall specify:

(a) Requirements concerning the proper use, maintenance, and installation, when appropriate, of monitoring equipment or methods, including biological monitoring methods when appropriate;

(b) Required monitoring including type, intervals, and frequency sufficient to yield data which are representative of the monitored activity including, when appropriate, continuous monitoring;

(c) Applicable reporting requirements based upon the impact of the regulated activity and as specified in Rules R315-264 and 266. Reporting shall be no less frequent than specified in the above regulations.

R315-270-32. Hazardous Waste Permit Program -- Establishing Permit Conditions.

(a) In addition to conditions required in all permits (Section R315-270-30) the Director shall establish conditions, as required on a case-by-case basis, in permits under Section R315-270-50 (duration of permits), Subsection R315-270-33(a) (schedules of compliance), and Section R315-270-31 (monitoring).

(b)(1) Each permit shall include permit conditions necessary to achieve compliance with Sections 19-6-101 through 125 and rules adopted thereunder, including each of the applicable requirements specified in Rules R315-264, 266, and 268. In satisfying this provision, the Director may incorporate applicable requirements of Rules R315-264, 266, and 268 directly into the permit or establish other permit conditions that are based on these rules.

(2) Each permit issued under Section 19-6-108 shall contain terms and conditions as the Director determines necessary to protect human health and the environment.

(3) If, as the result of an assessment(s) or other information, the Director determines that conditions are necessary in addition to those required under 40 CFR parts 63, subpart EEE, Rule R315-264 or 266 to ensure protection of human health and the environment, he shall include those terms and conditions in a permit for a hazardous waste combustion unit.

(c) An applicable requirement is a statutory or regulatory requirement which takes effect prior to final administrative disposition of a permit. An applicable requirement is also any requirement which takes effect prior to the modification or revocation and reissuance of a permit, to the extent allowed in Section R315-270-41.

(d) New or reissued permits, and to the extent allowed under Section R315-270-41, modified or revoked and reissued permits, shall incorporate each of the applicable requirements referenced in Section R315-270-32 and in Section R315-270-31.

(e) Incorporation. All permit conditions shall be incorporated either expressly or by reference. If incorporated by reference, a specific citation to the applicable regulations or requirements shall be given in the permit.

R315-270-33. Hazardous Waste Permit Program -- Schedules of Compliance.

(a) The permit may, when appropriate, specify a schedule of compliance leading to compliance with Sections 19-6-101 through 125 and rules adopted thereunder.

(1) Time for compliance. Any schedules of compliance under Section R315-270-33 shall require compliance as soon as possible.

(2) Interim dates. Except as provided in Subsection R315-270-33(b)(1)(ii), if a permit establishes a schedule of compliance which exceeds 1 year from the date of permit issuance, the schedule shall set forth interim requirements and the dates for their achievement.

(i) The time between interim dates shall not exceed 1 year.

(ii) If the time necessary for completion of any interim requirement is more than 1 year and is not readily divisible into stages for completion, the permit shall specify interim dates for the submission of reports of progress toward completion of the interim requirements and indicate a projected completion date.

(3) Reporting. The permit shall be written to require that no later than 14 days following each interim date and the final date of compliance, the permittee shall notify the Director in writing, of its compliance or noncompliance with the interim or final requirements.

(b) Alternative schedules of compliance. A permit applicant or permittee may cease conducting regulated activities; by receiving a terminal volume of hazardous waste

and, for treatment and storage HWM facilities, closing pursuant to applicable requirements; and, for disposal HWM facilities, closing and conducting post-closure care pursuant to applicable requirements; rather than continue to operate and meet permit requirements as follows:

(1) If the permittee decides to cease conducting regulated activities at a given time within the term of a permit which has already been issued:

(i) The permit may be modified to contain a new or additional schedule leading to timely cessation of activities; or

(ii) The permittee shall cease conducting permitted activities before noncompliance with any interim or final compliance schedule requirement already specified in the permit.

(2) If the decision to cease conducting regulated activities is made before issuance of a permit whose term shall include the termination date, the permit shall contain a schedule leading to termination which shall ensure timely compliance with applicable requirements.

(3) If the permittee is undecided whether to cease conducting regulated activities, the Director may issue or modify a permit to contain two schedules as follows:

(i) Both schedules shall contain an identical interim deadline requiring a final decision on whether to cease conducting regulated activities no later than a date which ensures sufficient time to comply with applicable requirements in a timely manner if the decision is to continue conducting regulated activities;

(ii) One schedule shall lead to timely compliance with applicable requirements;

(iii) The second schedule shall lead to cessation of regulated activities by a date which shall ensure timely compliance with applicable requirements;

(iv) Each permit containing two schedules shall include a requirement that after the permittee has made a final decision under Subsection R315-270-33(b)(3)(i) it shall follow the schedule leading to compliance if the decision is to continue conducting regulated activities, and follow the schedule leading to termination if the decision is to cease conducting regulated activities.

(4) The applicant's or permittee's decision to cease conducting regulated activities shall be evidenced by a firm public commitment satisfactory to the Director, such as resolution of the board of directors of a corporation.

R315-270-40. Hazardous Waste Permit Program -- Transfer of Permits.

(a) A permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued, under Subsection R315-270-40(b) or 41(b)(2), to identify the new permittee and incorporate such other requirements as may be necessary under the appropriate Act.

(b) Changes in the ownership or operational control of a facility may be made as a Class 1 modification with prior written approval of the Director in accordance with Section R315-270-42. The new owner or operator shall submit a revised permit application no later than 90 days prior to the scheduled change. A written agreement containing a specific date for transfer of permit responsibility between the current and new permittees shall also be submitted to the Director. When a transfer of ownership or operational control occurs, the old owner or operator shall comply with the requirements of Sections R315-264-140 through 151 until the new owner or operator has demonstrated that he or she is complying with the requirements of Sections R315-264-140 through 151. The new owner or operator shall demonstrate compliance with Sections R315-264-140 through 151 requirements within six months of the date of the change of ownership or operational control of the facility.

Upon demonstration to the Director by the new owner or operator of compliance with Sections R315-264-140 through 151, the Director shall notify the old owner or operator that he or she no longer needs to comply with Sections R315-264-140 through 151 as of the date of demonstration.

R315-270-41. Hazardous Waste Permit Program -- Modification or Revocation and Reissuance of Permits.

When the Director receives any information; for example, inspects the facility, receives information submitted by the permittee as required in the permit, see Section R315-270-30, receives a request for revocation and reissuance under Section R315-124-5 or conducts a review of the permit file; the Director may determine whether one or more of the causes listed in Subsections R315-270-41(a) and (b) for modification, or revocation and reissuance or both exist. If cause exists, the Director may modify or revoke and reissue the permit accordingly, subject to the limitations of Subsection R315-270-41(c), and may request an updated application if necessary. When a permit is modified, only the conditions subject to modification are reopened. If a permit is revoked and reissued, the entire permit is reopened and subject to revision and the permit is reissued for a new term. See Subsection R315-124-5(c)(2). If cause does not exist under Section R315-270-41, the Director shall not modify or revoke and reissue the permit, except on request of the permittee. If a permit modification is requested by the permittee, the Director shall approve or deny the request according to the procedures of Subsection R315-270-42. Otherwise, a draft permit shall be prepared and other procedures in Rule R315-124 followed.

(a) Causes for modification. The following are causes for modification, but not revocation and reissuance, of permits; the following may be causes for revocation and reissuance, as well as modification, when the permittee requests or agrees.

(1) Alterations. There are material and substantial alterations or additions to the permitted facility or activity which occurred after permit issuance which justify the application of permit conditions that are different or absent in the existing permit.

(2) Information. The Director has received information. Permits may be modified during their terms for this cause only if the information was not available at the time of permit issuance, other than revised regulations, guidance, or test methods, and would have justified the application of different permit conditions at the time of issuance.

(3) New statutory requirements or regulations. The standards or regulations on which the permit was based have been changed by statute, through promulgation of new or amended standards or regulations, or by judicial decision after the permit was issued.

(4) Compliance schedules. The Director determines good cause exists for modification of a compliance schedule, such as an act of God, strike, flood, or materials shortage or other events over which the permittee has little or no control and for which there is no reasonably available remedy.

(5) Notwithstanding any other provision in Section R315-270-41, when a permit for a land disposal facility is reviewed by the Director under Subsection R315-270-50(d), the Director shall modify the permit as necessary to assure that the facility continues to comply with the currently applicable requirements in Rules R315-124, 260 through 266, and 270.

(b) Causes for modification or revocation and reissuance. The following are causes to modify or, alternatively, revoke and reissue a permit:

(1) Cause exists for termination under Section R315-270-43, and the Director determines that modification or revocation and reissuance is appropriate.

(2) The Director has received notification; as required in the permit, see Subsection R315-270-30(1)(3); of a proposed

transfer of the permit.

(c) Facility siting. Suitability of the facility location will not be considered at the time of permit modification or revocation and reissuance unless new information or standards indicate that a threat to human health or the environment exists which was unknown at the time of permit issuance.

R315-270-42. Hazardous Waste Permit Program -- Permit Modification at the Request of the Permittee.

(a) Class 1 modifications.

(1) Except as provided in Subsection R315-270-42(a)(2), the permittee may put into effect Class 1 modifications listed in appendix I of Section R315-270-42 under the following conditions:

(i) The permittee shall notify the Director concerning the modification by certified mail or other means that establish proof of delivery within 7 calendar days after the change is put into effect. This notice shall specify the changes being made to permit conditions or supporting documents referenced by the permit and shall explain why they are necessary. Along with the notice, the permittee shall provide the applicable information required by Sections R315-270-13 through 21, 62, and 63.

(ii) The permittee shall send a notice of the modification to all persons on the facility mailing list, maintained by the Director in accordance with Subsection R315-124-10(c)(1)(ix), and the appropriate units of State and local government, as specified in Subsection R315-124-10(c)(1)(x). This notification shall be made within 90 calendar days after the change is put into effect. For the Class 1 modifications that require prior Director approval, the notification shall be made within 90 calendar days after the Director approves the request.

(iii) Any person may request the Director to review, and the Director may for cause reject, any Class 1 modification. The Director shall inform the permittee by certified mail that a Class 1 modification has been rejected, explaining the reasons for the rejection. If a Class 1 modification has been rejected, the permittee shall comply with the original permit conditions.

(2) Class 1 permit modifications identified in appendix I by an asterisk may be made only with the prior written approval of the Director.

(3) For a Class 1 permit modification, the permittee may elect to follow the procedures in Subsection R315-270-42(b) for Class 2 modifications instead of the Class 1 procedures. The permittee shall inform the Director of this decision in the notice required in Subsection R315-270-42(b)(1).

(b) Class 2 modifications.

(1) For Class 2 modifications, listed in appendix I of Section R315-270-42, the permittee shall submit a modification request to the Director that:

(i) Describes the exact change to be made to the permit conditions and supporting documents referenced by the permit;

(ii) Identifies that the modification is a Class 2 modification;

(iii) Explains why the modification is needed; and

(iv) Provides the applicable information required by Sections R315-270-13 through 21, 62, and 63.

(2) The permittee shall send a notice of the modification request to all persons on the facility mailing list maintained by the Director and to the appropriate units of State and local government as specified in Subsections R315-124-10(c)(1)(ix) and (x) and shall publish this notice in a major local newspaper of general circulation. This notice shall be mailed and published within 7 days before or after the date of submission of the modification request, and the permittee shall provide to the Director evidence of the mailing and publication. The notice shall include:

(i) Announcement of a 60-day comment period, in accordance with Subsection R315-270-42(b)(5), and the name and address of an Agency contact to whom comments shall be

sent;

(ii) Announcement of the date, time, and place for a public meeting held in accordance with Subsection R315-270-42(b)(4);

(iii) Name and telephone number of the permittee's contact person;

(iv) Name and telephone number of an Agency contact person;

(v) Location where copies of the modification request and any supporting documents can be viewed and copied; and

(vi) The following statement: "The permittee's compliance history during the life of the permit being modified is available from the Agency contact person."

(3) The permittee shall place a copy of the permit modification request and supporting documents in a location accessible to the public in the vicinity of the permitted facility.

(4) The permittee shall hold a public meeting no earlier than 15 days after the publication of the notice required in Subsection R315-270-42(b)(2) and no later than 15 days before the close of the 60-day comment period. The meeting shall be held to the extent practicable in the vicinity of the permitted facility.

(5) The public shall be provided 60 days to comment on the modification request. The comment period shall begin on the date the permittee publishes the notice in the local newspaper. Comments should be submitted to the Division contact identified in the public notice.

(6)(i) No later than 90 days after receipt of the notification request, the Director shall:

(A) Approve the modification request, with or without changes, and modify the permit accordingly;

(B) Deny the request;

(C) Determine that the modification request shall follow the procedures in Subsection R315-270-42(c) for Class 3 modifications for the following reasons:

(1) There is significant public concern about the proposed modification; or

(2) The complex nature of the change requires the more extensive procedures of Class 3.

(D) Approve the request, with or without changes, as a temporary authorization having a term of up to 180 days, or

(E) Notify the permittee that the Director will decide on the request within the next 30 days.

(ii) If the Director notifies the permittee of a 30-day extension for a decision, the Director shall, no later than 120 days after receipt of the modification request:

(A) Approve the modification request, with or without changes, and modify the permit accordingly;

(B) Deny the request; or

(C) Determine that the modification request shall follow the procedures in Subsection R315-270-42(c) for Class 3 modifications for the following reasons:

(1) There is significant public concern about the proposed modification; or

(2) The complex nature of the change requires the more extensive procedures of Class 3.

(D) Approve the request, with or without changes, as a temporary authorization having a term of up to 180 days.

(iii) If the Director fails to make one of the decisions specified in Subsection R315-270-42(b)(6)(ii) by the 120th day after receipt of the modification request, the permittee is automatically authorized to conduct the activities described in the modification request for up to 180 days, without formal action by the Director. The authorized activities shall be conducted as described in the permit modification request and shall be in compliance with all appropriate standards of Rule R315-265. If the Director approves, with or without changes, or denies the modification request during the term of the temporary or automatic authorization provided for in Section R315-270-42(b)(6)(i), (ii), or (iii), such action cancels the

temporary or automatic authorization.

(iv)(A) In the case of an automatic authorization under Subsection R315-270-42(b)(6)(iii), or a temporary authorization under Subsection R315-270-42(b)(6)(i)(D) or (ii)(D), if the Director has not made a final approval or denial of the modification request by the date 50 days prior to the end of the temporary or automatic authorization, the permittee shall within seven days of that time send a notification to persons on the facility mailing list, and make a reasonable effort to notify other persons who submitted written comments on the modification request, that:

(1) The permittee has been authorized temporarily to conduct the activities described in the permit modification request, and

(2) Unless the Director acts to give final approval or denial of the request by the end of the authorization period, the permittee shall receive automatic authorization to conduct such activities for the life of the permit.

(B) If the owner/operator fails to notify the public by the date specified in Subsection R315-270-42(b)(6)(iv)(A), the effective date of the permanent authorization shall be deferred until 50 days after the owner/operator notifies the public.

(v) Except as provided in Subsection R315-270-42(b)(6)(vii), if the Director does not finally approve or deny a modification request before the end of the automatic or temporary authorization period or reclassify the modification as a Class 3, the permittee is authorized to conduct the activities described in the permit modification request for the life of the permit unless modified later under Section R315-270-41 or 42. The activities authorized under Subsection R315-270-42(b) shall be conducted as described in the permit modification request and shall be in compliance with all appropriate standards of Rule R315-265.

(vi) In making a decision to approve or deny a modification request, including a decision to issue a temporary authorization or to reclassify a modification as a Class 3, the Director shall consider all written comments submitted during the public comment period and shall respond in writing to all significant comments in the Director's decision.

(vii) With the written consent of the permittee, the Director may extend indefinitely or for a specified period the time periods for final approval or denial of a modification request or for reclassifying a modification as a Class 3.

(7) The Director may deny or change the terms of a Class 2 permit modification request under Subsection R315-270-42(b)(6)(i) through (iii) for the following reasons:

(i) The modification request is incomplete;

(ii) The requested modification does not comply with the appropriate requirements of Rule R315-264 or other applicable requirements; or

(iii) The conditions of the modification fail to protect human health and the environment.

(8) The permittee may perform any construction associated with a Class 2 permit modification request beginning 60 days after the submission of the request unless the Director establishes a later date for commencing construction and informs the permittee in writing before day 60.

(c) Class 3 modifications.

(1) For Class 3 modifications listed in appendix I of Section R315-270-42, the permittee shall submit a modification request to the Director that:

(i) Describes the exact change to be made to the permit conditions and supporting documents referenced by the permit;

(ii) Identifies that the modification is a Class 3 modification;

(iii) Explains why the modification is needed; and

(iv) Provides the applicable information required by Sections R315-270-13 through 22, 62, 63, and 66.

(2) The permittee shall send a notice of the modification

request to all persons on the facility mailing list maintained by the Director and to the appropriate units of State and local government as specified in Subsection R315-124-10(c)(1)(ix) and shall publish this notice in a major local newspaper of general circulation. This notice shall be mailed and published within seven days before or after the date of submission of the modification request, and the permittee shall provide to the Director evidence of the mailing and publication. The notice shall include:

(i) Announcement of a 60-day comment period, and a name and address of the Director to whom comments shall be sent;

(ii) Announcement of the date, time, and place for a public meeting on the modification request, in accordance with Subsection R315-270-42(c)(4);

(iii) Name and telephone number of the permittee's contact person;

(iv) Name and telephone number of a Division contact person;

(v) Location where copies of the modification request and any supporting documents can be viewed and copied; and

(vi) The following statement: "The permittee's compliance history during the life of the permit being modified is available from the Division's contact person."

(3) The permittee shall place a copy of the permit modification request and supporting documents in a location accessible to the public in the vicinity of the permitted facility.

(4) The permittee shall hold a public meeting no earlier than 15 days after the publication of the notice required in Subsection R315-270-42(c)(2) and no later than 15 days before the close of the 60-day comment period. The meeting shall be held to the extent practicable in the vicinity of the permitted facility.

(5) The public shall be provided at least 60 days to comment on the modification request. The comment period shall begin on the date the permittee publishes the notice in the local newspaper. Comments should be submitted to the Director.

(6) After the conclusion of the 60-day comment period, the Director shall grant or deny the permit modification request according to the permit modification procedures of Rule R315-124. In addition, the Director shall consider and respond to all significant written comments received during the 60-day comment period.

(d) Other modifications.

(1) In the case of modifications not explicitly listed in appendix I of Section R315-270-42, the permittee may submit a Class 3 modification request to the Director, or the permittee may request a determination by the Director that the modification should be reviewed and approved as a Class 1 or Class 2 modification. If the permittee requests that the modification be classified as a Class 1 or 2 modification, the permittee shall provide the Director with the necessary information to support the requested classification.

(2) The Director shall make the determination described in Subsection R315-270-42(d)(1) as promptly as practicable. In determining the appropriate class for a specific modification, the Director shall consider the similarity of the modification to other modifications codified in appendix I and the following criteria:

(i) Class 1 modifications apply to minor changes that keep the permit current with routine changes to the facility or its operation. These changes do not substantially alter the permit conditions or reduce the capacity of the facility to protect human health or the environment. In the case of Class 1 modifications, the Director may require prior approval.

(ii) Class 2 modifications apply to changes that are necessary to enable a permittee to respond, in a timely manner, to,

(A) Common variations in the types and quantities of the wastes managed under the facility permit,

(B) Technological advancements, and

(C) Changes necessary to comply with new regulations, where these changes can be implemented without substantially changing design specifications or management practices in the permit.

(iii) Class 3 modifications substantially alter the facility or its operation.

(e) Temporary authorizations.

(1) Upon request of the permittee, the Director may, without prior public notice and comment, grant the permittee a temporary authorization in accordance with Subsection R315-270-42(e). Temporary authorizations shall have a term of not more than 180 days.

(2)(i) The permittee may request a temporary authorization for:

(A) Any Class 2 modification meeting the criteria in Subsection R315-270-42(e)(3)(ii), and

(B) Any Class 3 modification that meets the criteria in Subsection R315-270-42(e)(3)(ii)(A) or (B); or that meets the criteria in Subsections R315-270-42(e)(3)(ii)(C) through (E) and provides improved management or treatment of a hazardous waste already listed in the facility permit.

(ii) The temporary authorization request shall include:

(A) A description of the activities to be conducted under the temporary authorization;

(B) An explanation of why the temporary authorization is necessary; and

(C) Sufficient information to ensure compliance with Rule R315-264 standards.

(iii) The permittee shall send a notice about the temporary authorization request to all persons on the facility mailing list maintained by the Director and to appropriate units of State and local governments as specified in Subsection R315-124-10(c)(ix). This notification shall be made within seven days of submission of the authorization request.

(3) The Director shall approve or deny the temporary authorization as quickly as practical. To issue a temporary authorization, the Director shall find:

(i) The authorized activities are in compliance with the standards of Rule R315-264.

(ii) The temporary authorization is necessary to achieve one of the following objectives before action is likely to be taken on a modification request:

(A) To facilitate timely implementation of closure or corrective action activities;

(B) To allow treatment or storage in tanks or containers, or in containment buildings in accordance with Rule R315-268;

(C) To prevent disruption of ongoing waste management activities;

(D) To enable the permittee to respond to sudden changes in the types or quantities of the wastes managed under the facility permit; or

(E) To facilitate other changes to protect human health and the environment.

(4) A temporary authorization may be reissued for one additional term of up to 180 days provided that the permittee has requested a Class 2 or 3 permit modification for the activity covered in the temporary authorization, and:

(i) The reissued temporary authorization constitutes the Director's decision on a Class 2 permit modification in accordance with Subsection R315-270-42(b)(6)(i)(D) or (ii)(D), or

(ii) The Director determines that the reissued temporary authorization involving a Class 3 permit modification request is warranted to allow the authorized activities to continue while the modification procedures of Subsection R315-270-42(c) are conducted.

(f) Public notice and appeals of permit modification decisions.

(1) The Director shall notify persons on the facility mailing list and appropriate units of State and local government within 10 days of any decision under Section R315-270-42 to grant or deny a Class 2 or 3 permit modification request. The Director shall also notify such persons within 10 days after an automatic authorization for a Class 2 modification goes into effect under Subsection R315-270-42(b)(6)(iii) or (v).

(2) The Director's decision to grant or deny a Class 2 or 3 permit modification request under Section R315-270-42 may be appealed under the permit appeal procedures of Section R315-124-19.

(3) An automatic authorization that goes into effect under Subsection R315-270-42(b)(6)(iii) or (v) may be appealed under the permit appeal procedures of Section R315-124-19; however, the permittee may continue to conduct the activities pursuant to the automatic authorization unless and until a final determination is made.

(g) Newly regulated wastes and units.

(1) The permittee is authorized to continue to manage wastes listed or identified as hazardous under Rule R315-261, or to continue to manage hazardous waste in units newly regulated as hazardous waste management units, if:

(i) The unit was in existence as a hazardous waste facility with respect to the newly listed or characterized waste or newly regulated waste management unit on the effective date of the final rule listing or identifying the waste, or regulating the unit;

(ii) The permittee submits a Class 1 modification request on or before the date on which the waste or unit becomes subject to the new requirements;

(iii) The permittee is in compliance with the applicable standards of Rules R315-265 and 266;

(iv) The permittee also submits a complete Class 2 or 3 modification request within 180 days of the effective date of the rule listing or identifying the waste, or subjecting the unit to hazardous waste management standards;

(v) In the case of land disposal units, the permittee certifies that each such unit is in compliance with all applicable requirements of Rule R315-265 for groundwater monitoring and financial responsibility on the date 12 months after the effective date of the rule identifying or listing the waste as hazardous, or regulating the unit as a hazardous waste management unit. If the owner or operator fails to certify compliance with all these requirements, the permittee shall lose authority to operate under Section R315-270-42.

(2) New wastes or units added to a facility's permit under Subsection R315-270-42(g) do not constitute expansions for the purpose of the 25 percent capacity expansion limit for Class 2 modifications.

(h) Reserved.

(i) Permit modification list. The Director shall maintain a list of all approved permit modifications and shall publish a notice once a year in a State-wide newspaper that an updated list is available for review.

(j) Combustion facility changes to meet 40 CFR 63 MACT standards. The following procedures apply to hazardous waste combustion facility permit modifications requested under appendix I of Section R315-270-42, section L(9).

(1) Facility owners or operators shall have complied with the Notification of Intent to Comply (NIC) requirements of 40 CFR 63.1210 that were in effect prior to October 11, 2000, (See 40 CFR part 63 Section 63.1200-63.1499 revised as of July 1, 2000) in order to request a permit modification under Section R315-270-42 for the purpose of technology changes needed to meet the standards under 40 CFR 63.1203, 63.1204, and 63.1205.

(2) Facility owners or operators shall comply with the Notification of Intent to Comply (NIC) requirements of 40 CFR

63.1210(b) and 63.1212(a) before a permit modification can be requested under Section R315-270-42 for the purpose of technology changes needed to meet the 40 CFR 63.1215, 63.1216, 63.1217, 63.1218, 63.1219, 63.1220, and 63.1221 standards promulgated on October 12, 2005.

(3) If the Director does not approve or deny the request within 90 days of receiving it, the request shall be deemed approved. The Director may, at the Director's discretion, extend this 90 day deadline one time for up to 30 days by notifying the facility owner or operator.

(k) Waiver of permit conditions in support of transition to the 40 CFR 63 MACT standards.

(1) the permittee may request to have specific operating and emissions limits waived by submitting a Class 1 permit modification request under appendix I of Section R315-270-42, section L(10). The permittee shall:

(i) Identify the specific RCRA permit operating and emissions limits which the permittee is requesting to waive;

(ii) Provide an explanation of why the changes are necessary in order to minimize or eliminate conflicts between the hazardous waste permit and MACT compliance; and

(iii) Discuss how the revised provisions will be sufficiently protective.

(iv) The Director shall approve or deny the request within 30 days of receipt of the request. The Director may, at the Director's discretion, extend this 30 day deadline one time for up to 30 days by notifying the facility owner or operator.

(2) To request this modification in conjunction with MACT performance testing where permit limits may only be waived during actual test events and pretesting, as defined under 40 CFR 63.1207(h)(2)(i) and (ii), for an aggregate time not to exceed 720 hours of operation, renewable at the discretion of the Director, the permittee shall:

(i) Submit a modification request to the Director at the same time test plans are submitted to the Director; and

(ii) The Director may elect to approve or deny the request contingent upon approval of the test plans.

Table

Appendix I to Section R315-270-42 -- Classification of Permit Modification

Modifications	Class
A. General Permit Provisions	
1. Administrative and informational changes	1
2. Correction of typographical errors	1
3. Equipment replacement or upgrading with functionally equivalent components, e.g., pipes, valves, pumps, conveyors, controls	1
4. Changes in the frequency of or procedures for monitoring, reporting, sampling, or maintenance activities by the permittee:	
a. To provide for more frequent monitoring, reporting, sampling, or maintenance	1
b. Other changes,	2
5. Schedule of compliance:	
a. Changes in interim compliance dates, with prior approval of the Director	1
b. Extension of final compliance date	3
6. Changes in expiration date of permit to allow earlier permit termination, with prior approval of the Director	1
7. Changes in ownership or operational control of a facility, provided the procedures of Subsection R315-270-40(b) are followed	1
8. Changes to remove permit conditions that are no longer applicable, i.e., because the standards upon which they are based are no longer applicable to the facility.	1
9. Changes to remove permit conditions applicable to a unit excluded under the provisions of Section R315-261-4.	1
10. Changes in the expiration date of a permit issued to a facility at which all units are excluded under the provisions of Section	1

R315-261-4.	
B. General Facility Standards	
1. Changes to waste sampling or analysis methods	
a. To conform with agency guidance or regulations	1
b. To incorporate changes associated with F039, multi-source leachate, sampling or analysis methods	1
c. To incorporate changes associated with underlying hazardous constituents in ignitable or corrosive wastes	1
d. Other changes	2
2. Changes to analytical quality assurance/control plan:	
a. To conform with agency guidance or regulations	1
b. Other changes	2
3. Changes in procedures for maintaining the operating record	1
4. Changes in frequency or content of inspection schedules	2
5. Changes in the training plan:	
a. That affect the type or decrease the amount of training given to employees	2
b. Other changes	1
6. Contingency plan:	
a. Changes in emergency procedures, i.e., spill or release response procedures	2
b. Replacement with functionally equivalent equipment, upgrade, or relocate emergency equipment listed	1
c. Removal of equipment from emergency equipment list	2
d. Changes in name, address, or phone number of coordinators or other persons or agencies identified in the plan	1
7. Construction quality assurance plan:	
a. Changes that the CQA officer certifies in the operating record will provide equivalent or better certainty that the unit components meet the design specifications	1
b. Other changes	2

Note: When a permit modification, such as introduction of a new unit, requires a change in facility plans or other general facility standards, that change shall be reviewed under the same procedures as the permit modification.

C. Ground-Water Protection	
1. Changes to wells:	
a. Changes in the number, location, depth, or design of upgradient or downgradient wells of permitted ground-water monitoring system	2
b. Replacement of an existing well that has been damaged or rendered inoperable, without change to location, design, or depth of the well	1
2. Changes in ground-water sampling or analysis procedures or monitoring schedule, with prior approval of the Director	1
3. Changes in statistical procedure for determining whether a statistically significant change in ground-water quality between upgradient and downgradient wells has occurred, with prior approval of the Director	1
4. Changes in point of compliance	2
5. Changes in indicator parameters, hazardous constituents, or concentration limits, including ACLs:	
a. As specified in the groundwater protection standard	3
b. As specified in the detection monitoring program	2
6. Changes to a detection monitoring program as required by Subsection R315-264-98(h), unless otherwise specified in this appendix	2
7. Compliance monitoring program:	
a. Addition of compliance monitoring program as required by Sections R315-264-98(g)(4) and R315-264-99	3
b. Changes to a compliance monitoring program as required by Subsection R315-264-99(j), unless otherwise specified in this appendix	2
8. Corrective action program:	
a. Addition of a corrective action program as required by Subsection R315-264-99(h)(2) and Section R315-264-100	3
b. Changes to a corrective action program as required by Subsection R315-264-100(h), unless otherwise specified in this appendix	2
D. Closure	
1. Changes to the closure plan:	

<ul style="list-style-type: none"> a. Changes in estimate of maximum extent of operations or maximum inventory of waste on-site at any time during the active life of the facility, with prior approval of the Director 1¹ b. Changes in the closure schedule for any unit, changes in the final closure schedule for the facility, or extension of the closure period, with prior approval of the Director 1¹ c. Changes in the expected year of final closure, where other permit conditions are not changed, with prior approval of the Director 1¹ d. Changes in procedures for decontamination of facility equipment or structures, with prior approval of the Director 1¹ e. Changes in approved closure plan resulting from unexpected events occurring during partial or final closure, unless otherwise specified in this appendix 2 f. Extension of the closure period to allow a landfill, surface impoundment or land treatment unit to receive non-hazardous wastes after final receipt of hazardous wastes under Subsections R315-264-113(d) and (e) 2 	<ul style="list-style-type: none"> 2. Creation of a new landfill unit as part of closure 3 3. Addition of the following new units to be used temporarily for closure activities: <ul style="list-style-type: none"> a. Surface impoundments 3 b. Incinerators 3 c. Waste piles that do not comply with Subsection R315-264-250(c) 3 d. Waste piles that comply with Subsection R315-264-250(c) 2 e. Tanks or containers, other than specified below 2 f. Tanks used for neutralization, dewatering, phase separation, or component separation, with prior approval of the Director 1¹ g. Staging piles 2 	<p>Note: See Subsection R315-270-42(g) for modification procedures to be used for the management of newly listed or identified wastes.</p> <ul style="list-style-type: none"> 4. Storage or treatment of different wastes in containers: <ul style="list-style-type: none"> a. That require addition of units or change in treatment process or management standards, provided that the wastes are restricted from land disposal and are to be treated to meet some or all of the applicable treatment standards, or that are to be treated to satisfy, in whole or in part, the standard of "use of practically available technology that yields the greatest environmental benefit." This modification is not applicable to dioxin-containing wastes, F020, 021, 022, 023, 026, 027, and 028) 1¹ b. That do not require the addition of units or a change in the treatment process or management standards, and provided that the units have previously received wastes of the same type, e.g., incinerator scrubber water. This modification is not applicable to dioxin-containing wastes, F020, 021, 022, 023, 026, 027, and 028 1¹
<ul style="list-style-type: none"> E. Post-Closure <ul style="list-style-type: none"> 1. Changes in name, address, or phone number of contact in post-closure plan 1 2. Extension of post-closure care period 2 3. Reduction in the post-closure care period 3 4. Changes to the expected year of final closure, where other permit conditions are not changed 1 5. Changes in post-closure plan necessitated by events occurring during the active life of the facility, including partial and final closure 2 	<ul style="list-style-type: none"> G. Tanks <ul style="list-style-type: none"> 1. <ul style="list-style-type: none"> a. Modification or addition of tank units resulting in greater than 25% increase in the facility's tank capacity, except as provided in G(1)(c), G(1)(d), and G(1)(e) below 3 b. Modification or addition of tank units resulting in up to 25% increase in the facility's tank capacity, except as provided in G(1)(d) and G(1)(e) below 2 c. Addition of a new tank that will operate for more than 90 days using any of the following physical or chemical treatment technologies: neutralization, dewatering, phase separation, or component separation 2 d. After prior approval of the Director, addition of a new tank that will operate for up to 90 days using any of the following physical or chemical treatment technologies: neutralization, dewatering, phase separation, or component separation 1¹ e. Modification or addition of tank units or treatment processes necessary to treat wastes that are restricted from land disposal to meet some or all of the applicable treatment standards or to treat wastes to satisfy, in whole or in part, the standard of "use of practically available technology that yields the greatest environmental benefit," with prior approval of the Director. This modification may also involve addition of new waste codes. It is not applicable to dioxin-containing wastes, F020, 021, 022, 023, 026, 027, and 028 1¹ 2. Modification of a tank unit or secondary containment system without increasing the capacity of the unit 2 3. Replacement of a tank with a tank that meets the same design standards and has a capacity within +/-10% of the replaced tank provided <ul style="list-style-type: none"> -The capacity difference is no more than 1500 gallons, -The facility's permitted tank capacity is not increased, and -The replacement tank meets the same conditions in the permit. 1 4. Modification of a tank management practice 2 5. Management of different wastes in tanks: <ul style="list-style-type: none"> a. That require additional or different management practices, tank design, different fire protection specifications, or significantly different tank treatment process from that authorized in the permit, except as provided in (G)(5)(c) below 3 b. That do not require additional or different management practices, tank design, different fire protection specifications, or significantly different tank treatment process than authorized in the permit, except as provided in (G)(5)(d) 2 c. That require addition of units or change 1¹ 	
<ul style="list-style-type: none"> F. Containers <ul style="list-style-type: none"> 1. Modification or addition of container units: <ul style="list-style-type: none"> a. Resulting in greater than 25% increase in the facility's container storage capacity, except as provided in F(1)(c) and F(4)(a) below 3 b. Resulting in up to 25% increase in the facility's container storage capacity, except as provided in F(1)(c) and F(4)(a) below 2 c. Or treatment processes necessary to treat wastes that are restricted from land disposal to meet some or all of the applicable treatment standards or to treat wastes to satisfy (in whole or in part) the standard of "use of practically available technology that yields the greatest environmental benefit" contained in Subsection R315-268-8(a)(2)(ii), with prior approval of the Director. This modification may also involve addition of new waste codes or narrative descriptions of wastes. It is not applicable to dioxin-containing wastes, F020, 021, 022, 023, 026, 027, and 028 1¹ 2. <ul style="list-style-type: none"> a. Modification of a container unit without increasing the capacity of the unit 2 b. Addition of a roof to a container unit without alteration of the containment system 1 3. Storage of different wastes in containers, except as provided in (F)(4) below: <ul style="list-style-type: none"> a. That require additional or different management practices from those authorized in the permit 3 b. That do not require additional or different management practices from those authorized in the permit 2 	<ul style="list-style-type: none"> 1. Modification or addition of container units: <ul style="list-style-type: none"> a. That require additional or different management practices from those authorized in the permit 3 b. That do not require additional or different management practices from those authorized in the permit 2 2. That require addition of units or change 1¹ 	

in treatment processes or management standards, provided that the wastes are restricted from land disposal and are to be treated to meet some or all of the applicable treatment standards or that are to be treated to satisfy, in whole or in part, the standard of "use of practically available technology that yields the greatest environmental benefit." The modification is not applicable to dioxin-containing wastes, F020, 021, 022, 023, 026, 027, and 028		treatment capacity	
d. That do not require the addition of units or a change in the treatment process or management standards, and provided that the units have previously received wastes of the same type, e.g., incinerator scrubber water. This modification is not applicable to dioxin-containing wastes, F020, 021, 022, 023, 026, 027, and 028	1	b. Resulting in up to 25% increase in the facility's waste pile storage or treatment capacity	2
Note: See Subsection R315-270-42(g) for modification procedures to be used for the management of newly listed or identified wastes.		2. Modification of waste pile unit without increasing the capacity of the unit	2
H. Surface Impoundments		3. Replacement of a waste pile unit with another waste pile unit of the same design and capacity and meeting all waste pile conditions in the permit	1
1. Modification or addition of surface impoundment units that result in increasing the facility's surface impoundment storage or treatment capacity	3	4. Modification of a waste pile management practice	2
2. Replacement of a surface impoundment unit	3	5. Storage or treatment of different wastes in waste piles:	
3. Modification of a surface impoundment unit without increasing the facility's surface impoundment storage or treatment capacity and without modifying the unit's liner, leak detection system, or leachate collection system	2	a. That require additional or different management practices or different design of the unit	3
4. Modification of a surface impoundment management practice	2	b. That do not require additional or different management practices or different design of the unit	2
5. Treatment, storage, or disposal of different wastes in surface impoundments:		6. Conversion of an enclosed waste pile to a containment building unit	2
a. That require additional or different management practices or different design of the liner or leak detection system than authorized in the permit	3	Note: See Subsection R315-270-42(g) for modification procedures to be used for the management of newly listed or identified wastes.	
b. That do not require additional or different management practices or different design of the liner or leak detection system than authorized in the permit	2	J. Landfills and Unenclosed Waste Piles	
c. That are wastes restricted from land disposal that meet the applicable treatment standards or that are treated to satisfy the standard of "use of practically available technology that yields the greatest environmental benefit," and provided that the unit meets the minimum technological requirements stated in Subsection R315-268-5(h)(2). This modification is not applicable to dioxin-containing wastes, F020, 021, 022, 023, 026, 027, and 028	1	1. Modification or addition of landfill units that result in increasing the facility's disposal capacity	3
d. That are residues from wastewater treatment or incineration, provided that disposal occurs in a unit that meets the minimum technological requirements stated in Subsection R315-268-5(h)(2), and provided further that the surface impoundment has previously received wastes of the same type, for example, incinerator scrubber water. This modification is not applicable to dioxin-containing wastes, F020, 021, 022, 023, 026, 027, and 028	1	2. Replacement of a landfill	3
6. Modifications of unconstructed units to comply with Subsection R315-264-221(c) and 226(d), and Sections R315-264-222, and 223	1	3. Addition or modification of a liner, leachate collection system, leachate detection system, run-off control, or final cover system	3
7. Changes in response action plan:		4. Modification of a landfill unit without changing a liner, leachate collection system, leachate detection system, run-off control, or final cover system	2
a. Increase in action leakage rate	3	5. Modification of a landfill management practice	2
b. Change in a specific response reducing its frequency or effectiveness	3	6. Landfill different wastes:	
c. Other changes	2	a. That require additional or different management practices, different design of the liner, leachate collection system, or leachate detection system	3
Note: See Subsection R315-270-42(g) for modification procedures to be used for the management of newly listed or identified wastes.		b. That do not require additional or different management practices, different design of the liner, leachate collection system, or leachate detection system	2
I. Enclosed Waste Piles. For all waste piles except those complying with Subsection R315-264-250(c), modifications are treated the same as for a landfill. The following modifications are applicable only to waste piles complying with Subsection R315-264-250(c).		c. That are wastes restricted from land disposal that meet the applicable treatment standards or that are treated to satisfy the standard of "use of practically available technology that yields the greatest environmental benefit," and provided that the landfill unit meets the minimum technological requirements stated in Subsection R315-268-5(h)(2). This modification is not applicable to dioxin-containing wastes, F020, 021, 022, 023, 026, 027, and 028	1
1. Modification or addition of waste pile units:		d. That are residues from wastewater treatment or incineration, provided that disposal occurs in a landfill unit that meets the minimum technological requirements stated in Subsection R315-268-5(h)(2), and provided further that the landfill has previously received wastes of the same type, for example, incinerator ash. This modification is not applicable to dioxin-containing wastes, F020, 021, 022, 023, 026, 027, and 028	1
a. Resulting in greater than 25% increase in the facility's waste pile storage or	3	7. Modifications of unconstructed units to comply with Subsection R315-264-251(c), Sections R315-264-252 and 253, Subsections R315-264-254(c) and R315-264-301(c), Section R315-264-302, Subsection R315-264-303(c), and Section R315-264-304	1
		8. Changes in response action plan:	
		a. Increase in action leakage rate	3
		b. Change in a specific response reducing its frequency or effectiveness	3
		c. Other changes	2
		Note: See Subsection R315-270-42(g) for modification procedures to be used for the management of newly listed or identified wastes.,	
		K. Land Treatment	
		1. Lateral expansion of or other modification of a land treatment unit to increase areal extent	3
		2. Modification of run-on control system	2
		3. Modify run-off control system	3

4.	Other modifications of land treatment unit component specifications or standards required in permit	2	limit, a chlorine/chloride feed rate limit, a metal feed rate limit, or an ash feed rate limit. The Director shall require a new trial burn to substantiate compliance with the regulatory performance standards unless this demonstration can be made through other means	
5.	Management of different wastes in land treatment units:			
	a. That require a change in permit operating conditions or unit design specifications	3		
	b. That do not require a change in permit operating conditions or unit design specifications	2		
	Note: See Subsection R315-270-42(g) for modification procedures to be used for the management of newly listed or identified wastes			
6.	Modification of a land treatment unit management practice to:			
	a. Increase rate or change method of waste application	3		
	b. Decrease rate of waste application	1		
7.	Modification of a land treatment unit management practice to change measures of pH or moisture content, or to enhance microbial or chemical reactions	2		
8.	Modification of a land treatment unit management practice to grow food chain crops, to add to or replace existing permitted crops with different food chain crops, or to modify operating plans for distribution of animal feeds resulting from such crops	3		
9.	Modification of operating practice due to detection of releases from the land treatment unit pursuant to Subsection R315-264-278(g)(2)	3		
10.	Changes in the unsaturated zone monitoring system, resulting in a change to the location, depth, number of sampling points, or replace unsaturated zone monitoring devices or components of devices with devices or components that have specifications different from permit requirements	3		
11.	Changes in the unsaturated zone monitoring system that do not result in a change to the location, depth, number of sampling points, or that replace unsaturated zone monitoring devices or components of devices with devices or components having specifications different from permit requirements	2		
12.	Changes in background values for hazardous constituents in soil and soil-pore liquid	2		
13.	Changes in sampling, analysis, or statistical procedure	2		
14.	Changes in land treatment demonstration program prior to or during the demonstration	2		
15.	Changes in any condition specified in the permit for a land treatment unit to reflect results of the land treatment demonstration, provided performance standards are met, and the Director's prior approval has been received	1		
16.	Changes to allow a second land treatment demonstration to be conducted when the results of the first demonstration have not shown the conditions under which the wastes can be treated completely, provided the conditions for the second demonstration are substantially the same as the conditions for the first demonstration and have received the prior approval of the Director	1		
17.	Changes to allow a second land treatment demonstration to be conducted when the results of the first demonstration have not shown the conditions under which the wastes can be treated completely, where the conditions for the second demonstration are not substantially the same as the conditions for the first demonstration	3		
18.	Changes in vegetative cover requirements for closure	2		
L.	Incinerators, Boilers, and Industrial Furnaces:			
	1. Changes to increase by more than 25% any of the following limits authorized in the permit: A thermal feed rate limit, a feedstream feed rate limit, a chlorine/chloride feed rate limit, a metal feed rate limit, or an ash feed rate limit. The Director shall require a new trial burn to substantiate compliance with the regulatory performance standards unless this demonstration can be made through other means	3		
	2. Changes to increase by up to 25% any of the following limits authorized in the permit: A thermal feed rate limit, a feedstream feed rate	2		
	3. Modification of an incinerator, boiler, or industrial furnace unit by changing the internal size or geometry of the primary or secondary combustion units, by adding a primary or secondary combustion unit, by substantially changing the design of any component used to remove HCl/Cl ₂ , metals, or particulate from the combustion gases, or by changing other features of the incinerator, boiler, or industrial furnace that could affect its capability to meet the regulatory performance standards. The Director shall require a new trial burn to substantiate compliance with the regulatory performance standards unless this demonstration can be made through other means	3		
	4. Modification of an incinerator, boiler, or industrial furnace unit in a manner that would not likely affect the capability of the unit to meet the regulatory performance standards but which would change the operating conditions or monitoring requirements specified in the permit. The Director may require a new trial burn to demonstrate compliance with the regulatory performance standards	2		
	5. Operating requirements:			
	a. Modification of the limits specified in the permit for minimum or maximum combustion gas temperature, minimum combustion gas residence time, oxygen concentration in the secondary combustion chamber, flue gas carbon monoxide and hydrocarbon concentration, maximum temperature at the inlet to the particulate matter emission control system, or operating parameters for the air pollution control system. The Director shall require a new trial burn to substantiate compliance with the regulatory performance standards unless this demonstration can be made through other means	3		
	b. Modification of any stack gas emission limits specified in the permit, or modification of any conditions in the permit concerning emergency shutdown or automatic waste feed cutoff procedures or controls	3		
	c. Modification of any other operating condition or any inspection or recordkeeping requirement specified in the permit	2		
	6. Burning different wastes:			
	a. If the waste contains a POHC that is more difficult to burn than authorized by the permit or if burning of the waste requires compliance with different regulatory performance standards than specified in the permit. The Director shall require a new trial burn to substantiate compliance with the regulatory performance standards unless this demonstration can be made through other means	3		
	b. If the waste does not contain a POHC that is more difficult to burn than authorized by the permit and if burning of the waste does not require compliance with different regulatory performance standards than specified in the permit	2		
	Note: See Subsection R315-270-42(g) for modification procedures to be used for the management of newly listed or identified wastes			
	7. Shakedown and trial burn:			
	a. Modification of the trial burn plan or any of the permit conditions applicable during the shakedown period for determining operational readiness after construction, the trial burn period, or the period immediately following the trial burn	2		
	b. Authorization of up to an additional 720 hours of waste burning during the shakedown period for determining operational readiness after construction, with the prior approval of the Director	1		

- c. Changes in the operating requirements set in the permit for conducting a trial burn, provided the change is minor and has received the prior approval of the Director 1
- d. Changes in the ranges of the operating requirements set in the permit to reflect the results of the trial burn, provided the change is minor and has received the prior approval of the Director 1
- 8. Substitution of an alternative type of nonhazardous waste fuel that is not specified in the permit 1
- 9. Technology changes needed to meet standards under 40 CFR part 63 (Subpart EEE-National Emission Standards for Hazardous Air Pollutants From Hazardous Waste Combustors), provided the procedures of Subsection R315-270-42(j) are followed. 1
- 10. Changes to RCRA permit provisions needed to support transition to 40 CFR part 63 (Subpart EEE-National Emission Standards for Hazardous Air Pollutants From Hazardous Waste Combustors), provided the procedures of Subsection R315-270-42(k) are followed.
- M. Containment Buildings.
 - 1. Modification or addition of containment building units:
 - a. Resulting in greater than 25% increase in the facility's containment building storage or treatment capacity 3
 - b. Resulting in up to 25% increase in the facility's containment building storage or treatment capacity 2
 - 2. Modification of a containment building unit or secondary containment system without increasing the capacity of the unit 2
 - 3. Replacement of a containment building with a containment building that meets the same design standards provided:
 - a. The unit capacity is not increased 1
 - b. The replacement containment building meets the same conditions in the permit 1
 - 4. Modification of a containment building management practice 2
 - 5. Storage or treatment of different wastes in containment buildings:
 - a. That require additional or different management practices 3
 - b. That do not require additional or different management practices 2
- N. Corrective Action:
 - 1. Approval of a corrective action management unit pursuant to Section R315-264-552 3
 - 2. Approval of a temporary unit or time extension for a temporary unit pursuant to Section R315-264-553 2
 - 3. Approval of a staging pile or staging pile operating term extension pursuant to Section R315-264-554 2
- O. Burden Reduction
 - 1. Reserved
 - 2. Development of one contingency plan based on Integrated Contingency Plan Guidance pursuant to Subsection R315-264-52(b) 1
 - 3. Changes to recordkeeping and reporting requirements pursuant to: Subsections R315-264-56(i), R315-264-343(a)(2), R315-264-1061(b)(1),(d), R315-264-1062(a)(2), R315-264-196(f), R315-264-100(g), and R315-264-113(e)(5) 1
 - 4. Changes to inspection frequency for tank systems pursuant to Subsection R315-264-195(b) 1
 - 5. Changes to detection and compliance monitoring program pursuant to Subsections R315-264-98(d), (g)(2), and (g)(3), R315-264-99(f), and (g) 1

¹Class 1 modifications requiring prior Agency approval.

R315-270-43. Hazardous Waste Permit Program -- Termination of Permits.

- (a) The following are causes for terminating a permit during its term, or for denying a permit renewal application:
 - (1) Noncompliance by the permittee with any condition of the permit;
 - (2) The permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts, or the permittee's misrepresentation of any relevant facts at any time;

or

(3) A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination.

(b) The Director shall follow the applicable procedures in Rule R315-124 in terminating any permit under Section R315-270-43.

R315-270-50. Hazardous Waste Permit Program -- Duration of Permits.

(a) Hazardous Waste operation permits shall be effective for a fixed term not to exceed 10 years.

(b) Except as provided in Section R315-270-51, the term of a permit shall not be extended by modification beyond the maximum duration specified in Section R315-270-50.

(c) The Director may issue any permit for a duration that is less than the full allowable term under Section R315-270-50.

(d) Each permit for a land disposal facility shall be reviewed by the Director five years after the date of permit issuance or reissuance and shall be modified as necessary, as provided in Section R315-270-41.

R315-270-51. Hazardous Waste Permit Program -- Continuation of Expiring Permits.

(a) The conditions of an expired permit continue in force until the effective date of a new permit if:

(1) The permittee has submitted a timely application under Section R315-270-14 and the applicable sections in Sections R315-270-15 through 29 which is a complete application for a new permit; and

(2) The Director through no fault of the permittee, does not issue a new permit with an effective date under Section R315-124-15 on or before the expiration date of the previous permit, for example, when issuance is impracticable due to time or resource constraints.

(b) Effect. Permits continued under Section R315-270-51 remain fully effective and enforceable.

(c) Enforcement. When the permittee is not in compliance with the conditions of the expiring or expired permit, the Director may choose to do any or all of the following:

(1) Initiate enforcement action based upon the permit which has been continued;

(2) Issue a notice of intent to deny the new permit under Section R315-124-6. If the permit is denied, the owner or operator would then be required to cease the activities authorized by the continued permit or be subject to enforcement action for operating without a permit;

(3) Issue a new permit under Rule R315-124 with appropriate conditions; or

(4) Take other actions authorized by these rules.

(d) State continuation. If a permittee has submitted a timely and complete application under applicable State law and regulations, the terms and conditions of an EPA-issued RCRA permit continue in force beyond the expiration date of the permit, but only until the effective date of the State's issuance or denial of a State RCRA permit.

R315-270-60. Hazardous Waste Permit Program -- Permits by Rule.

Notwithstanding any other provision of Section R315-270-60 or Rule R315-124, the following shall be deemed to have a approved hazardous waste permit if the conditions listed are met:

(a) Reserved

(b) Injection wells. The owner or operator of an injection well disposing of hazardous waste, if the owner or operator:

(1) Has a permit for underground injection issued under Rule R317-7 and 40 CFR 144 or 145; and

(2) Complies with the conditions of that permit and the

requirements of 40 CFR 144.14 and Section R317-7-11.

(3) For UIC permits issued after November 8, 1984:

(i) Complies with Section R315-264-101; and

(ii) Where the UIC well is the only unit at a facility which requires a hazardous waste permit, complies with Subsection R315-270-14(d).

(c) Publicly owned treatment works. The owner or operator of a POTW which accepts for treatment hazardous waste, if the owner or operator:

(1) Has an NPDES permit;

(2) Complies with the conditions of that permit; and

(3) Complies with the following regulations:

(i) Section R315-264-11, Identification number;

(ii) Section R315-264-71, Use of manifest system;

(iii) Section R315-264-72, Manifest discrepancies;

(iv) Section R315-264-73(a) and (b)(1), Operating record;

(v) Section R315-264-75, Biennial report;

(vi) Section R315-264-76, Unmanifested waste report; and

(vii) For NPDES permits issued after November 8, 1984,

Section R315-264-101.

(4) If the waste meets all Federal, State, and local pretreatment requirements which would be applicable to the waste if it were being discharged into the POTW through a sewer, pipe, or similar conveyance.

R315-270-61. Hazardous Waste Permit Program -- Emergency Permits.

(a) Notwithstanding any other provision of Rule R315-270 or Rule R315-124, in the event the Director finds an imminent and substantial endangerment to human health or the environment the Director may issue a temporary emergency permit:

(1) To a non-permitted facility to allow treatment, storage, or disposal of hazardous waste; or

(2) To a permitted facility to allow treatment, storage, or disposal of a hazardous waste not covered by an effective permit.

(b) This emergency permit:

(1) May be oral or written. If oral, it shall be followed in five days by a written emergency permit;

(2) Shall not exceed 90 days in duration;

(3) Shall clearly specify the hazardous wastes to be received, and the manner and location of their treatment, storage, or disposal;

(4) May be terminated by the Director at any time without process if the Director determines that termination is appropriate to protect human health and the environment;

(5) Shall be accompanied by a public notice published under Subsection R315-124-10(b) including:

(i) Name and address of the office granting the emergency authorization;

(ii) Name and location of the permitted hazardous waste management facility;

(iii) A brief description of the wastes involved;

(iv) A brief description of the action authorized and reasons for authorizing it; and

(v) Duration of the emergency permit; and

(6) Shall incorporate, to the extent possible and not inconsistent with the emergency situation, all applicable requirements of Rule R315-270 and Rules R315-264 and 266.

R315-270-62. Hazardous Waste Permit Program -- Hazardous Waste Incinerator Permits.

When an owner or operator of a hazardous waste incineration unit becomes subject to hazardous waste permit requirements after October 12, 2005, or when an owner or operator of an existing hazardous waste incineration unit demonstrates compliance with the air emission standards and limitations in Subsection R307-214-2(39), i.e., by conducting a

comprehensive performance test and submitting a Notification of Compliance under 40 CFR 63.1207(j) and 63.1210(d), which are incorporated by reference in Subsection R307-214-2(39), documenting compliance with all applicable requirements of Subsection R307-214-2(39), the requirements of Section R315-270-62 do not apply, except those provisions the Director determines are necessary to ensure compliance with Subsections R315-264-345(a) and (c) if the owner or operator elects to comply with Section R315-270-235(a)(1)(i) to minimize emissions of toxic compounds from startup, shutdown, and malfunction events. Nevertheless, the Director may apply the provisions of Section R315-270-62, on a case-by-case basis, for purposes of information collection in accordance with Subsections R315-270-10(k), 10(l), 32(b)(2), and 32(b)(3).

(a) For the purposes of determining operational readiness following completion of physical construction, the Director shall establish permit conditions, including but not limited to allowable waste feeds and operating conditions, in the permit to a new hazardous waste incinerator. These permit conditions shall be effective for the minimum time required to bring the incinerator to a point of operational readiness to conduct a trial burn, not to exceed 720 hours operating time for treatment of hazardous waste. The Director may extend the duration of this operational period once, for up to 720 additional hours, at the request of the applicant when good cause is shown. The permit may be modified to reflect the extension according to Section R315-270-42.

(1) Applicants shall submit a statement, with part B of the permit application, which suggests the conditions necessary to operate in compliance with the performance standards of Section R315-264-343 during this period. This statement should include, at a minimum, restrictions on waste constituents, waste feed rates and the operating parameters identified in Section R315-264-345.

(2) The Director shall review this statement and any other relevant information submitted with part B of the permit application and specify requirements for this period sufficient to meet the performance standards of Section R315-264-343.

(b) For the purposes of determining feasibility of compliance with the performance standards of Section R315-264-343 and of determining adequate operating conditions under Section R315-264-345, the Director shall establish conditions in the permit for a new hazardous waste incinerator to be effective during the trial burn.

(1) Applicants shall propose a trial burn plan, prepared under Subsection R315-270-62(b)(2) with a part B of the permit application.

(2) The trial burn plan shall include the following information:

(i) An analysis of each waste or mixture of wastes to be burned which includes:

(A) Heat value of the waste in the form and composition in which it will be burned.

(B) Viscosity (if applicable), or description of the physical form of the waste.

(C) An identification of any hazardous organic constituents listed in Rule R315-261, appendix VIII, which are present in the waste to be burned, except that the applicant need not analyze for constituents listed in Rule R315-261, appendix VIII, which would reasonably not be expected to be found in the waste. The constituents excluded from analysis shall be identified, and the basis for the exclusion stated. The waste analysis shall rely on appropriate analytical techniques.

(D) An approximate quantification of the hazardous constituents identified in the waste, within the precision produced by appropriate analytical methods.

(ii) A detailed engineering description of the incinerator for which the permit is sought including:

(A) Manufacturer's name and model number of

incinerator, if available.

- (B) Type of incinerator.
- (C) Linear dimensions of the incinerator unit including the cross sectional area of combustion chamber.
- (D) Description of the auxiliary fuel system, type/feed.
- (E) Capacity of prime mover.
- (F) Description of automatic waste feed cut-off system(s).
- (G) Stack gas monitoring and pollution control equipment.
- (H) Nozzle and burner design.
- (I) Construction materials.
- (J) Location and description of temperature, pressure, and flow indicating and control devices.

(iii) A detailed description of sampling and monitoring procedures, including sampling and monitoring locations in the system, the equipment to be used, sampling and monitoring frequency, and planned analytical procedures for sample analysis.

(iv) A detailed test schedule for each waste for which the trial burn is planned including date(s), duration, quantity of waste to be burned, and other factors relevant to the Director's decision under Subsection R315-270-62(b)(5).

(v) A detailed test protocol, including, for each waste identified, the ranges of temperature, waste feed rate, combustion gas velocity, use of auxiliary fuel, and any other relevant parameters that will be varied to affect the destruction and removal efficiency of the incinerator.

(vi) A description of, and planned operating conditions for, any emission control equipment which will be used.

(vii) Procedures for rapidly stopping waste feed, shutting down the incinerator, and controlling emissions in the event of an equipment malfunction.

(viii) Such other information as the Director reasonably finds necessary to determine whether to approve the trial burn plan in light of the purposes of Subsection R315-270-62(b)(2) and the criteria in Subsection R315-270-62(b)(5).

(3) The Director, in reviewing the trial burn plan, shall evaluate the sufficiency of the information provided and may require the applicant to supplement this information, if necessary, to achieve the purposes of Subsection R315-270-62(b)(2).

(4) Based on the waste analysis data in the trial burn plan, the Director shall specify as trial Principal Organic Hazardous Constituents (POHCs), those constituents for which destruction and removal efficiencies shall be calculated during the trial burn. These trial POHCs shall be specified by the Director based on The Director's estimate of the difficulty of incineration of the constituents identified in the waste analysis, their concentration or mass in the waste feed, and, for wastes listed in Sections R315-261-30 through 35, the hazardous waste organic constituent or constituents identified in appendix VII of Rule R315-261 as the basis for listing.

(5) The Director shall approve a trial burn plan if he finds that:

- (i) The trial burn is likely to determine whether the incinerator performance standard required by Section R315-264-343 can be met;
- (ii) The trial burn itself shall not present an imminent hazard to human health or the environment;
- (iii) The trial burn will help the Director to determine operating requirements to be specified under Section R315-264-345; and
- (iv) The information sought in Subsection R315-270-62(b)(5)(i) and (ii) cannot reasonably be developed through other means.

(6) The Director shall send a notice to all persons on the facility mailing list as set forth in Subsection R315-124-10(c)(1)(ix) and to the appropriate units of State and local government as set forth in Subsection R315-124-10(c)(1)(x) announcing the scheduled commencement and completion dates

for the trial burn. The applicant may not commence the trial burn until after the Director has issued such notice.

(i) This notice shall be mailed within a reasonable time period before the scheduled trial burn. An additional notice is not required if the trial burn is delayed due to circumstances beyond the control of the facility or the permitting agency.

(ii) This notice shall contain:

(A) The name and telephone number of the applicant's contact person;

(B) The name and telephone number of the permitting agency's contact office;

(C) The location where the approved trial burn plan and any supporting documents can be reviewed and copied; and

(D) An expected time period for commencement and completion of the trial burn.

(7) During each approved trial burn, or as soon after the burn as is practicable, the applicant shall make the following determinations:

(i) A quantitative analysis of the trial POHCs in the waste feed to the incinerator.

(ii) A quantitative analysis of the exhaust gas for the concentration and mass emissions of the trial POHCs, oxygen (O₂) and hydrogen chloride (HCl).

(iii) A quantitative analysis of the scrubber water, if any; ash residues; and other residues, for the purpose of estimating the fate of the trial POHCs.

(iv) A computation of destruction and removal efficiency (DRE), in accordance with the DRE formula specified in Subsection R315-264-343(a).

(v) If the HCl emission rate exceeds 1.8 kilograms of HCl per hour, 4 pounds per hour, a computation of HCl removal efficiency in accordance with Subsection R315-264-343(b).

(vi) A computation of particulate emissions, in accordance with Subsection R315-264-343(c).

(vii) An identification of sources of fugitive emissions and their means of control.

(viii) A measurement of average, maximum, and minimum temperatures and combustion gas velocity.

(ix) A continuous measurement of carbon monoxide (CO) in the exhaust gas.

(x) Such other information as the Director may specify as necessary to ensure that the trial burn will determine compliance with the performance standards in Section R315-264-343 and to establish the operating conditions required by Section R315-264-345 as necessary to meet that performance standard.

(8) The applicant shall submit to the Director a certification that the trial burn has been carried out in accordance with the approved trial burn plan, and shall submit the results of all the determinations required in Subsection R315-270-62(b)(6). This submission shall be made within 90 days of completion of the trial burn, or later if approved by the Director.

(9) All data collected during any trial burn shall be submitted to the Director following the completion of the trial burn.

(10) All submissions required by Subsection R315-270-62(b) shall be certified on behalf of the applicant by the signature of a person authorized to sign a permit application or a report under Section R315-270-11.

(11) Based on the results of the trial burn, the Director shall set the operating requirements in the final permit according to Section R315-264-345. The permit modification shall proceed according to Section R315-270-42.

(c) For the purposes of allowing operation of a new hazardous waste incinerator following completion of the trial burn and prior to final modification of the permit conditions to reflect the trial burn results, the Director may establish permit conditions, including but not limited to allowable waste feeds and operating conditions sufficient to meet the requirements of

Section R315-264-345, in the permit to a new hazardous waste incinerator. These permit conditions shall be effective for the minimum time required to complete sample analysis, data computation and submission of the trial burn results by the applicant, and modification of the facility permit by the Director.

(1) Applicants shall submit a statement, with part B of the permit application, which identifies the conditions necessary to operate in compliance with the performance standards of Section R315-264-343 during this period. This statement should include, at a minimum, restrictions on waste constituents, waste feed rates, and the operating parameters in Section R315-264-345.

(2) The Director shall review this statement and any other relevant information submitted with part B of the permit application and specify those requirements for this period most likely to meet the performance standards of Section R315-264-34 based on his engineering judgment.

(d) For the purpose of determining feasibility of compliance with the performance standards of Section R315-264-343 and of determining adequate operating conditions under Section R315-264-345, the applicant for a permit for an existing hazardous waste incinerator shall prepare and submit a trial burn plan and perform a trial burn in accordance with Subsection R315-270-19(b) and Subsections R315-270-62(b)(2) through (b)(5) and (b)(7) through (b)(10) or, instead, submit other information as specified in Subsection R315-270-19(c). The Director shall announce the Director's intention to approve the trial burn plan in accordance with the timing and distribution requirements of Subsection R315-270-62(b)(6). The contents of the notice shall include: the name and telephone number of a contact person at the facility; the name and telephone number of a contact office at the permitting agency; the location where the trial burn plan and any supporting documents can be reviewed and copied; and a schedule of the activities that are required prior to permit issuance, including the anticipated time schedule for approval of the plan and the time period during which the trial burn would be conducted. Applicants submitting information under Subsection R315-270-19(a) are exempt from compliance with Sections R315-264-343 and 345 and, therefore, are exempt from the requirement to conduct a trial burn. Applicants who submit trial burn plans and receive approval before submission of a permit application shall complete the trial burn and submit the results, specified in Subsection R315-270-62(b)(7), with part B of the permit application. If completion of this process conflicts with the date set for submission of the part B application, the applicant shall contact the Director to establish a later date for submission of the part B application or the trial burn results. Trial burn results shall be submitted prior to issuance of the permit. When the applicant submits a trial burn plan with part B of the permit application, the Director shall specify a time period prior to permit issuance in which the trial burn shall be conducted and the results submitted.

R315-270-63. Hazardous Waste Permit Program -- Permits for Land Treatment Demonstrations Using Field Test or Laboratory Analyses.

(a) For the purpose of allowing an owner or operator to meet the treatment demonstration requirements of Section R315-264-272, the Director may issue a treatment demonstration permit. The permit shall contain only those requirements necessary to meet the standards in Subsection R315-264-272(c). The permit may be issued either as a treatment or disposal permit covering only the field test or laboratory analyses, or as a two-phase facility permit covering the field tests, or laboratory analyses, and design, construction operation and maintenance of the land treatment unit.

(1) The Director may issue a two-phase facility permit if

the Director finds that, based on information submitted in part B of the application, substantial, although incomplete or inconclusive, information already exists upon which to base the issuance of a facility permit.

(2) If the Director finds that not enough information exists upon which the Director can establish permit conditions to attempt to provide for compliance with all of the requirements of Sections R315-264-270 through 283, he shall issue a treatment demonstration permit covering only the field test or laboratory analyses.

(b) If the Director finds that a phased permit may be issued, the Director shall establish, as requirements in the first phase of the facility permit, conditions for conducting the field tests or laboratory analyses. These permit conditions shall include design and operating parameters, including the duration of the tests or analyses and, in the case of field tests, the horizontal and vertical dimensions of the treatment zone; monitoring procedures; post-demonstration clean-up activities; and any other conditions which the Director finds may be necessary under Subsection R315-264-272(c). The Director shall include conditions in the second phase of the facility permit to attempt to meet all Sections R315-264-270 through 283 requirements pertaining to unit design, construction, operation, and maintenance. The Director shall establish these conditions in the second phase of the permit based upon the substantial but incomplete or inconclusive information contained in the part B application.

(1) The first phase of the permit shall be effective as provided in Subsection R315-124-15(b).

(2) The second phase of the permit shall be effective as provided in Subsection R315-270-63(d).

(c) When the owner or operator who has been issued a two-phase permit has completed the treatment demonstration, the owner or operator shall submit to the Director a certification, signed by a person authorized to sign a permit application or report under Section R315-270-11, that the field tests or laboratory analyses have been carried out in accordance with the conditions specified in phase one of the permit for conducting such tests or analyses. The owner or operator shall also submit all data collected during the field tests or laboratory analyses within 90 days of completion of those tests or analyses unless the Director approves a later date.

(d) If the Director determines that the results of the field tests or laboratory analyses meet the requirements of Section R315-264-272, the Director shall modify the second phase of the permit to incorporate any requirements necessary for operation of the facility in compliance with Sections R315-264-270 through 283, based upon the results of the field tests or laboratory analyses.

(1) This permit modification may proceed under Section R315-270-42, or otherwise shall proceed as a modification under Subsection R315-270-41(a)(2). If such modifications are necessary, the second phase of the permit shall become effective only after those modifications have been made.

(2) If no modifications of the second phase of the permit are necessary, the Director shall give notice of the final decision to the permit applicant and to each person who submitted written comments on the phased permit or who requested notice of the final decision on the second phase of the permit. The second phase of the permit then will become effective as specified in Subsection R315-124-15(b).

R315-270-65. Hazardous Waste Permit Program -- Research, Development, and Demonstration Permits.

(a) The Director may issue a research, development, and demonstration permit for any hazardous waste treatment facility which proposes to utilize an innovative and experimental hazardous waste treatment technology or process for which permit standards for such experimental activity have not been

promulgated under Rules R315-264 or 266. Any such permit shall include such terms and conditions as will assure protection of human health and the environment. Such permits:

(1) Shall provide for the construction of such facilities as necessary, and for operation of the facility for not longer than one year unless renewed as provided in Subsection R315-270-64(d), and

(2) Shall provide for the receipt and treatment by the facility of only those types and quantities of hazardous waste which the Director deems necessary for purposes of determining the efficacy and performance capabilities of the technology or process and the effects of such technology or process on human health and the environment, and

(3) Shall include such requirements as the Director deems necessary to protect human health and the environment, including, but not limited to, requirements regarding monitoring, operation, financial responsibility, closure, and remedial action, and such requirements as the Director deems necessary regarding testing and providing of information to the Director with respect to the operation of the facility.

(b) For the purpose of expediting review and issuance of permits under Section R315-270-65, the Director may, consistent with the protection of human health and the environment, modify or waive permit application and permit issuance requirements in Rules R315-124 and 270 except that there may be no modification or waiver of regulations regarding financial responsibility, including insurance, or of procedures regarding public participation.

(c) The Director may order an immediate termination of all operations at the facility at any time the Director determines that termination is necessary to protect human health and the environment.

(d) Any permit issued under Section R315-270-65 may be renewed not more than three times. Each such renewal shall be for a period of not more than 1 year.

R315-270-66. Hazardous Waste Permit Program -- Permits for Boilers and Industrial Furnaces Burning Hazardous Waste.

When an owner or operator of a cement kiln, lightweight aggregate kiln, solid fuel boiler, liquid fuel boiler, or hydrochloric acid production furnace becomes subject to the hazardous waste permit requirements after October 12, 2005 or when an owner or operator of an existing cement kiln, lightweight aggregate kiln, solid fuel boiler, liquid fuel boiler, or hydrochloric acid production furnace demonstrates compliance with the air emission standards and limitations in Subsection R307-214-2(39), i.e., by conducting a comprehensive performance test and submitting a Notification of Compliance under 40 CFR 63.1207(j) and 63.1210(d) which are incorporated by reference in R307-214-2(39) documenting compliance with all applicable requirements of Subsection R307-214-2(39), the requirements of Section R315-270-66 do not apply. The requirements of Section R315-270-66 do apply, however, if the Director determines certain provisions are necessary to ensure compliance with Subsections R315-266-102(e)(1) and 102(e)(2)(iii) if owners and operators elect to comply with Subsection R315-270-235(a)(1)(i) to minimize emissions of toxic compounds from startup, shutdown, and malfunction events; or if you are an area source and elect to comply with the Sections R315-266-105, 106, and 107 standards and associated requirements for particulate matter, hydrogen chloride and chlorine gas, and non-mercury metals; or the Director determines certain provisions apply, on a case-by-case basis, for purposes of information collection in accordance with Subsections R315-270-10(k), 10(l), 32(b)(2), and 32(b)(3).

(a) General. Owners and operators of new boilers and industrial furnaces, those not operating under the interim status standards of Section R315-266-103, are subject to Subsections

R315-270-66(b) through (f). Boilers and industrial furnaces operating under the interim status standards of Section R315-266-103 are subject to Subsection R315-270-66(g).

(b) Permit operating periods for new boilers and industrial furnaces. A permit for a new boiler or industrial furnace shall specify appropriate conditions for the following operating periods:

(1) Pretrial burn period. For the period beginning with initial introduction of hazardous waste and ending with initiation of the trial burn, and only for the minimum time required to bring the boiler or industrial furnace to a point of operational readiness to conduct a trial burn, not to exceed 720 hours operating time when burning hazardous waste, the Director shall establish in the Pretrial Burn Period of the permit conditions, including but not limited to, allowable hazardous waste feed rates and operating conditions. The Director may extend the duration of this operational period once, for up to 720 additional hours, at the request of the applicant when good cause is shown. The permit may be modified to reflect the extension according to Section R315-270-42.

(i) Applicants shall submit a statement, with part B of the permit application that suggests the conditions necessary to operate in compliance with the standards of Sections R315-266-104 through 107 during this period. This statement should include, at a minimum, restrictions on the applicable operating requirements identified in Subsection R315-266-102(e).

(ii) The Director shall review this statement and any other relevant information submitted with part B of the permit application and specify requirements for this period sufficient to meet the performance standards of Sections R315-266-104 through 107.

(2) Trial burn period. For the duration of the trial burn, the Director shall establish conditions in the permit for the purposes of determining feasibility of compliance with the performance standards of Sections R315-266-104 through 107 and determining adequate operating conditions under Subsection R315-266-102(e). Applicants shall propose a trial burn plan, prepared under Subsection R315-270-66(c), to be submitted with part B of the permit application.

(3) Post-trial burn period.

(i) For the period immediately following completion of the trial burn, and only for the minimum period sufficient to allow sample analysis, data computation, and submission of the trial burn results by the applicant, and review of the trial burn results and modification of the facility permit by the Director to reflect the trial burn results, the Director shall establish the operating requirements most likely to ensure compliance with the performance standards of Sections R315-266-104 through 107.

(ii) Applicants shall submit a statement, with part B of the application that identifies the conditions necessary to operate during this period in compliance with the performance standards of Sections R315-266-104 through 107. This statement should include, at a minimum, restrictions on the operating requirements provided by Subsection R315-266-102(e).

(iii) The Director shall review this statement and any other relevant information submitted with part B of the permit application and specify requirements for this period sufficient to meet the performance standards of Sections R315-266-104 through 107.

(4) Final permit period. For the final period of operation, the Director shall develop operating requirements in conformance with Subsection R315-266-102(e) that reflect conditions in the trial burn plan and are likely to ensure compliance with the performance standards of Sections R315-266-104 through 107. Based on the trial burn results, the Director shall make any necessary modifications to the operating requirements to ensure compliance with the performance standards. The permit modification shall proceed according to Section R315-270-42.

(c) Requirements for trial burn plans. The trial burn plan shall include the following information. The Director, in reviewing the trial burn plan, shall evaluate the sufficiency of the information provided and may require the applicant to supplement this information, if necessary, to achieve the purposes of Subsections R315-270-66(c)(1) through (9):

(1) An analysis of each feed stream, including hazardous waste, other fuels, and industrial furnace feed stocks, as fired, that includes:

(i) Heating value, levels of antimony, arsenic, barium, beryllium, cadmium, chromium, lead, mercury, silver, thallium, total chlorine/chloride, and ash;

(ii) Viscosity or description of the physical form of the feed stream;

(2) An analysis of each hazardous waste, as fired, including:

(i) An identification of any hazardous organic constituents listed in appendix VIII, of Rule R315-261, that are present in the feed stream, except that the applicant need not analyze for constituents listed in appendix VIII that would reasonably not be expected to be found in the hazardous waste. The constituents excluded from analysis shall be identified and the basis for this exclusion explained. The waste analysis shall be conducted in accordance with appropriate analytical techniques.

(ii) An approximate quantification of the hazardous constituents identified in the hazardous waste, within the precision produced by appropriate analytical methods.

(iii) A description of blending procedures, if applicable, prior to firing the hazardous waste, including a detailed analysis of the hazardous waste prior to blending, an analysis of the material with which the hazardous waste is blended, and blending ratios.

(3) A detailed engineering description of the boiler or industrial furnace, including:

(i) Manufacturer's name and model number of the boiler or industrial furnace;

(ii) Type of boiler or industrial furnace;

(iii) Maximum design capacity in appropriate units;

(iv) Description of the feed system for the hazardous waste, and, as appropriate, other fuels and industrial furnace feedstocks;

(v) Capacity of hazardous waste feed system;

(vi) Description of automatic hazardous waste feed cutoff system(s);

(vii) Description of any air pollution control system; and

(viii) Description of stack gas monitoring and any pollution control monitoring systems.

(4) A detailed description of sampling and monitoring procedures including sampling and monitoring locations in the system, the equipment to be used, sampling and monitoring frequency, and planned analytical procedures for sample analysis.

(5) A detailed test schedule for each hazardous waste for which the trial burn is planned, including date(s), duration, quantity of hazardous waste to be burned, and other factors relevant to the Director's decision under Subsection R315-270-66(b)(2).

(6) A detailed test protocol, including, for each hazardous waste identified, the ranges of hazardous waste feed rate, and, as appropriate, the feed rates of other fuels and industrial furnace feedstocks, and any other relevant parameters that may affect the ability of the boiler or industrial furnace to meet the performance standards in Sections R315-266-104 through 107.

(7) A description of, and planned operating conditions for, any emission control equipment that will be used.

(8) Procedures for rapidly stopping the hazardous waste feed and controlling emissions in the event of an equipment malfunction.

(9) Such other information as the Director reasonably finds

necessary to determine whether to approve the trial burn plan in light of the purposes of Section R315-270-66(c) and the criteria in Subsection R315-270-66(b)(2).

(d) Trial burn procedures.

(1) A trial burn shall be conducted to demonstrate conformance with the standards of Sections R315-266-104 through 107 under an approved trial burn plan.

(2) The Director shall approve a trial burn plan if the Director finds that:

(i) The trial burn is likely to determine whether the boiler or industrial furnace can meet the performance standards of Sections R315-266-104 through 107;

(ii) The trial burn itself shall not present an imminent hazard to human health and the environment;

(iii) The trial burn will help the Director to determine operating requirements to be specified under Subsection R315-266-102(e); and

(iv) The information sought in the trial burn cannot reasonably be developed through other means.

(3) The Director shall send a notice to all persons on the facility mailing list as set forth in Subsection R315-124-10(c)(1)(ix) and to the appropriate units of State and local government as set forth in Subsection R315-124-10(c)(1)(x) announcing the scheduled commencement and completion dates for the trial burn. The applicant may not commence the trial burn until after the Director has issued such notice.

(i) This notice shall be mailed within a reasonable time period before the trial burn. An additional notice is not required if the trial burn is delayed due to circumstances beyond the control of the facility or the Director.

(ii) This notice shall contain:

(A) The name and telephone number of applicant's contact person;

(B) The name and telephone number of the Division;

(C) The location where the approved trial burn plan and any supporting documents can be reviewed and copied; and

(D) An expected time period for commencement and completion of the trial burn.

(4) The applicant shall submit to the Director a certification that the trial burn has been carried out in accordance with the approved trial burn plan, and shall submit the results of all the determinations required in Subsection R315-270-66(c). This submission shall be made within 90 days of completion of the trial burn, or later if approved by the Director.

(5) All data collected during any trial burn shall be submitted to the Director following completion of the trial burn.

(6) All submissions required by Subsection R315-270-66(d) shall be certified on behalf of the applicant by the signature of a person authorized to sign a permit application or a report under Section R315-270-11.

(e) Special procedures for DRE trial burns. When a DRE trial burn is required under Subsection R315-266-104(a), the Director shall specify, based on the hazardous waste analysis data and other information in the trial burn plan, as trial Principal Organic Hazardous Constituents (POHCs) those compounds for which destruction and removal efficiencies shall be calculated during the trial burn. These trial POHCs shall be specified by the Director based on information including the Director's estimate of the difficulty of destroying the constituents identified in the hazardous waste analysis, their concentrations or mass in the hazardous waste feed, and, for hazardous waste containing or derived from wastes listed in Sections R315-261-30 through 35, the hazardous waste organic constituent(s) identified in Appendix VII of Rule R315-261 as the basis for listing.

(f) Determinations based on trial burn. During each approved trial burn, or as soon after the burn as is practicable, the applicant shall make the following determinations:

(1) A quantitative analysis of the levels of antimony, arsenic, barium, beryllium, cadmium, chromium, lead, mercury, thallium, silver, and chlorine/chloride, in the feed streams; hazardous waste, other fuels, and industrial furnace feedstocks;

(2) When a DRE trial burn is required under Subsection R315-266-104(a):

(i) A quantitative analysis of the trial POHCs in the hazardous waste feed;

(ii) A quantitative analysis of the stack gas for the concentration and mass emissions of the trial POHCs; and

(iii) A computation of destruction and removal efficiency (DRE), in accordance with the DRE formula specified in Subsection R315-266-104(a);

(3) When a trial burn for chlorinated dioxins and furans is required under Subsection R315-266-104(e), a quantitative analysis of the stack gas for the concentration and mass emission rate of the 2,3,7,8-chlorinated tetra-octa congeners of chlorinated dibenzo-p-dioxins and furans, and a computation showing conformance with the emission standard;

(4) When a trial burn for particulate matter, metals, or HCl/Cl₂ is required under Section R315-266-105, or Subsections R315-266-106(c) or (d), or Subsections R315-266-107(b)(2) or (c), a quantitative analysis of the stack gas for the concentrations and mass emissions of particulate matter, metals, or hydrogen chloride (HCl) and chlorine (Cl₂), and computations showing conformance with the applicable emission performance standards;

(5) When a trial burn for DRE, metals, or HCl/Cl₂ is required under Subsections R315-266-104(a), 106(c) or (d), or 107(b)(2) or (c), a quantitative analysis of the scrubber water, if any; ash residues; other residues; and products for the purpose of estimating the fate of the trial POHCs, metals, and chlorine/chloride;

(6) An identification of sources of fugitive emissions and their means of control;

(7) A continuous measurement of carbon monoxide (CO), oxygen, and where required, hydrocarbons (HC), in the stack gas; and

(8) Such other information as the Director may specify as necessary to ensure that the trial burn shall determine compliance with the performance standards in Sections R315-266-104 through 107 and to establish the operating conditions required by Subsection R315-266-102(e) as necessary to meet those performance standards.

(g) Interim status boilers and industrial furnaces. For the purpose of determining feasibility of compliance with the performance standards of Sections R315-266-104 through 107 and of determining adequate operating conditions under Section R315-266-103, applicants owning or operating existing boilers or industrial furnaces operated under the interim status standards of Section R315-266-103 shall either prepare and submit a trial burn plan and perform a trial burn in accordance with the requirements of Section R315-270-66 or submit other information as specified in Subsection R315-270-22(a)(6). The Director shall announce the Director's intention to approve of the trial burn plan in accordance with the timing and distribution requirements of Subsection R315-270-66(d)(3). The contents of the notice shall include: the name and telephone number of a contact person at the facility; the name and telephone number of a contact office at the Division; the location where the trial burn plan and any supporting documents can be reviewed and copied; and a schedule of the activities that are required prior to permit issuance, including the anticipated time schedule for Director approval of the plan and the time periods during which the trial burn would be conducted. Applicants who submit a trial burn plan and receive approval before submission of the part B permit application shall complete the trial burn and submit the results specified in Subsection R315-270-66(f) with the part B permit application. If completion of this process

conflicts with the date set for submission of the part B application, the applicant shall contact the Director to establish a later date for submission of the part B application or the trial burn results. If the applicant submits a trial burn plan with part B of the permit application, the trial burn shall be conducted and the results submitted within a time period prior to permit issuance to be specified by the Director.

R315-270-68. Hazardous Waste Permit Program -- Remedial Action Plans (RAPs).

Remedial Action Plans (RAPs) are special forms of permits that are regulated under Sections R315-270-79 through 230.

R315-270-70. Hazardous Waste Permit Program -- Qualifying for Interim Status.

(a) Any person who owns or operates an "existing hazardous waste management facility" or a facility in existence on the effective date of statutory or regulatory amendments under the State or Federal Act that render the facility subject to the requirement to have a hazardous waste permit shall have interim status and shall be treated as having been issued a permit to the extent the owner or operator has:

(1) Complied with the requirements of section 3010(a) of RCRA pertaining to notification of hazardous waste activity or the notification requirements of Rules R315-260 through 266, 268 and 270.

Comment: Some existing facilities may not be required to file a notification under section 3010(a) of RCRA. These facilities may qualify for interim status by meeting Subsection R315-270-70(a)(2).

(2) Complied with the requirements of Section R315-270-10 governing submission of part A applications;

(b) Failure to qualify for interim status. If the Director has reason to believe upon examination of a part A application that it fails to meet the requirements of Section R315-270-13, the Director shall notify the owner or operator in writing of the apparent deficiency. Such notice shall specify the grounds for the Director's belief that the application is deficient. The owner or operator shall have 30 days from receipt to respond to such a notification and to explain or cure the alleged deficiency in the owner or operator's part A application. If, after such notification and opportunity for response, the Director determines that the application is deficient the Director may take appropriate enforcement action.

(c) Subsection R315-270-70(a) shall not apply to any facility which has been previously denied a hazardous waste permit or if authority to operate the facility under Federal or State authority has been previously terminated.

R315-270-71. Hazardous Waste Permit Program -- Operation During Interim Status.

(a) During the interim status period the facility shall not:

(1) Treat, store, or dispose of hazardous waste not specified in part A of the permit application;

(2) Employ processes not specified in part A of the permit application; or

(3) Exceed the design capacities specified in part A of the permit application.

(b) Interim status standards. During interim status, owners or operators shall comply with the interim status standards at Rule R315-265.

R315-270-72. Hazardous Waste Permit Program -- Changes During Interim Status.

(a) Except as provided in Subsection R315-270-72(b), the owner or operator of an interim status facility may make the following changes at the facility:

(1) Treatment, storage, or disposal of new hazardous wastes not previously identified in part A of the permit

application and, in the case of newly listed or identified wastes, addition of the units being used to treat, store, or dispose of the hazardous wastes on the effective date of the listing or identification if the owner or operator submits a revised part A permit application prior to such treatment, storage, or disposal;

(2) Increases in the design capacity of processes used at the facility if the owner or operator submits a revised part A permit application prior to such a change, along with a justification explaining the need for the change, and the Director approves the changes because:

(i) There is a lack of available treatment, storage, or disposal capacity at other hazardous waste management facilities, or

(ii) The change is necessary to comply with a Federal, State, or local requirement.

(3) Changes in the processes for the treatment, storage, or disposal of hazardous waste or addition of processes if the owner or operator submits a revised part A permit application prior to such change, along with a justification explaining the need for the change, and the Director approves the change because:

(i) The change is necessary to prevent a threat to human health and the environment because of an emergency situation, or

(ii) The change is necessary to comply with a Federal, State, or local requirement.

(4) Changes in the ownership or operational control of a facility if the new owner or operator submits a revised part A permit application no later than 90 days prior to the scheduled change. When a transfer of operational control of a facility occurs, the old owner or operator shall comply with the requirements of Sections R315-265-140 through 150, until the new owner or operator has demonstrated to the Director that the owner or operator is complying with the requirements of Sections R315-265-140 through 150. The new owner or operator shall demonstrate compliance with Sections R315-265-140 through 150 within six months of the date of the change in ownership or operational control of the facility. Upon demonstration to the Director by the new owner or operator of compliance with Sections R315-265-140 through 150, the Director shall notify the old owner or operator in writing that he no longer needs to comply with Sections R315-265-140 through 150 as of the date of demonstration. All other interim status duties are transferred effective immediately upon the date of the change in ownership or operational control of the facility.

(5) Changes made in accordance with an interim status corrective action order issued under Subsection 19-6-105(d) or by EPA under section 3008(h) or other Federal authority, or by a court in a judicial action brought by EPA or by an authorized State. Changes under Subsection R315-270-72(a)(5) are limited to the treatment, storage, or disposal of solid waste from releases that originate within the boundary of the facility.

(6) Addition of newly regulated units for the treatment, storage, or disposal of hazardous waste if the owner or operator submits a revised part A permit application on or before the date on which the unit becomes subject to the new requirements.

(b) Except as specifically allowed under Subsection R315-270-72(b), changes listed under Subsection R315-270-72(a) may not be made if they amount to reconstruction of the hazardous waste management facility. Reconstruction occurs when the capital investment in the changes to the facility exceeds 50 percent of the capital cost of a comparable entirely new hazardous waste management facility. If all other requirements are met, the following changes may be made even if they amount to a reconstruction:

(1) Changes made solely for the purposes of complying with the requirements of Section R315-265-193 for tanks and ancillary equipment.

(2) If necessary to comply with Federal, State, or local

requirements, changes to an existing unit, changes solely involving tanks or containers, or addition of replacement surface impoundments that satisfy the standards of section 3004(o).

(3) Changes that are necessary to allow owners or operators to continue handling newly listed or identified hazardous wastes that have been treated, stored, or disposed of at the facility prior to the effective date of the rule establishing the new listing or identification.

(4) Changes during closure of a facility or of a unit within a facility made in accordance with an approved closure plan.

(5) Changes necessary to comply with an interim status corrective action order issued under Subsection 19-6-105(d), or by EPA under section 3008(h) or other Federal authority, or by a court in a judicial proceeding brought by EPA or an authorized State, provided that such changes are limited to the treatment, storage, or disposal of solid waste from releases that originate within the boundary of the facility.

(6) Changes to treat or store, in tanks, containers, or containment buildings, hazardous wastes subject to land disposal restrictions imposed by Rule R315-268 or RCRA section 3004, provided that such changes are made solely for the purpose of complying with Rule R315-268 or RCRA section 3004.

(7) Addition of newly regulated units under Subsection R315-27-72(a)(6).

(8) Changes necessary to comply with standards under 40 CFR part 63, Subpart EEE-National Emission Standards for Hazardous Air Pollutants From Hazardous Waste Combustors, which is incorporated by reference in Subsection R307-214-2(39).

R315-270-73. Hazardous Waste Permit Program -- Termination of Interim Status.

Interim status terminates when:

(a) Final administrative disposition of a permit application, except an application for a remedial action plan (RAP) under Sections R315-270-79 through 230 is made.

(b) Interim status is terminated as provided in Subsection R315-270-10(e)(5).

(c) For owners or operators of each land disposal facility which has been granted interim status prior to November 8, 1984, on November 8, 1985, unless:

(1) The owner or operator submits a part B application for a permit for such facility prior to that date; and

(2) The owner or operator certifies that such facility is in compliance with all applicable ground-water monitoring and financial responsibility requirements.

(d) For owners or operators of each land disposal facility which is in existence on the effective date of statutory or regulatory amendments under the Federal Act, or Section 19-6-108, that render the facility subject to the requirement to have a hazardous waste permit and which is granted interim status, twelve months after the date on which the facility first becomes subject to such permit requirement unless the owner or operator of such facility:

(1) Submits a part B application for a hazardous waste permit for such facility before the date 12 months after the date on which the facility first becomes subject to such permit requirement; and

(2) Certifies that such facility is in compliance with all applicable ground water monitoring and financial responsibility requirements.

(e) For owners or operators of any land disposal unit that is granted authority to operate under Subsections R315-270-72(a) (1), (2) or (3), on the date 12 months after the effective date of such requirement, unless the owner or operator certifies that such unit is in compliance with all applicable ground-water monitoring and financial responsibility requirements.

(f) For owners and operators of each incinerator facility

which has achieved interim status prior to November 8, 1984, interim status terminates on November 8, 1989, unless the owner or operator of the facility submits a part B application for a hazardous waste permit for an incinerator facility by November 8, 1986.

(g) For owners or operators of any facility, other than a land disposal or an incinerator facility, which has achieved interim status prior to November 8, 1984, interim status terminates on November 8, 1992, unless the owner or operator of the facility submits a part B application for a hazardous waste permit for the facility by November 8, 1988.

R315-270-79. Hazardous Waste Permit Program -- Why Sections R315-270 through 230 Written In A Special Format?

Sections R315-270-79 through 230 are written in a special format to make it easier to understand the regulatory requirements. Like other rules adopted the Board, this establishes enforceable legal requirements. For Sections R315-270-79 through 230, "I" and "you" refer to the owner/operator.

R315-270-80. Hazardous Waste Permit Program -- What is a RAP?

(a) A RAP is a special form of hazardous waste permit that you, as an owner or operator, may obtain, instead of a permit issued under Sections R315-270-3 through 66, to authorize you to treat, store, or dispose of hazardous remediation waste, as defined in Section R315-260-10, at a remediation waste management site. A RAP may only be issued for the area of contamination where the remediation wastes to be managed under the RAP originated, or areas in close proximity to the contaminated area, except as allowed in limited circumstances under Section R315-270-230.

(b) The requirements in Sections R315-270-3 through 66 do not apply to RAPs unless those requirements for traditional permits are specifically required under Sections R315-270-80 through 230. The definitions in Section R315-270-2 apply to RAPs.

(c) Notwithstanding any other provision of Rule R315-270 or Rule R315-124, any document that meets the requirements in Section R315-270-80 constitutes a hazardous waste permit Section 19-6-108.

(d) A RAP may be:

(1) A stand-alone document that includes only the information and conditions required by Sections R315-270-79 through 230; or

(2) Part, or parts, of another document that includes information and/or conditions for other activities at the remediation waste management site, in addition to the information and conditions required by Sections R315-270-79 through 230.

(e) If you are treating, storing, or disposing of hazardous remediation wastes as part of a cleanup compelled by Federal or State cleanup authorities, your RAP does not affect your obligations under those authorities in any way.

(f) If you receive a RAP at a facility operating under interim status, the RAP does not terminate your interim status.

R315-270-85. Hazardous Waste Permit Program -- When Do I Need a Rap?

(a) Whenever you treat, store, or dispose of hazardous remediation wastes in a manner that requires a permit under Section R315-270-1, you shall either obtain:

(1) A permit according to Sections R315-270-3 through 66; or

(2) A RAP according to Sections R315-270-79 through 230.

(b) Treatment units that use combustion of hazardous remediation wastes at a remediation waste management site are not eligible for RAPs under Sections R315-270-79 through 230.

(c) You may obtain a RAP for managing hazardous remediation waste at an already permitted hazardous waste facility. You shall have these RAPs approved as a modification to your existing permit according to the requirements of Section R315-270-41 or 42 instead of the requirements in Sections R315-270-79 through 230. When you submit an application for such a modification, however, the information requirements in Subsections R315-270-42(a)(1)(i), (b)(1)(iv), and (c)(1)(iv) do not apply; instead, you shall submit the information required under Section R315-270-110. When your permit is modified the RAP becomes part of the hazardous waste permit. Therefore when your permit, including the RAP portion, is modified, revoked and reissued, terminated or when it expires, it will be modified according to the applicable requirements in Sections R315-270-40 through 42, revoked and reissued according to the applicable requirements in Sections R315-270-41 and 43, terminated according to the applicable requirements in Section R315-270-43, and expire according to the applicable requirements in Sections R315-270-50 and 51.

R315-270-90. Hazardous Waste Permit Program -- Does My Rap Grant Me Any Rights or Relieve Me of Any Obligations?

The provisions of Section R315-270-4 apply to RAPs. Note: The provisions of Subsection R315-270-4(a) provide you assurance that, as long as you comply with your RAP, the Director shall consider you in compliance with the rules adopted under Sections 19-6-101 through 125, and will not take enforcement actions against you. However, you should be aware of four exceptions to this provision that are listed in Section R315-270-4.

R315-270-95. Hazardous Waste Permit Program -- How Do I Apply for a Rap?

To apply for a RAP, you shall complete an application, sign it, and submit it to the Director according to the requirements in Sections R315-270-79 through 230.

R315-270-100. Hazardous Waste Permit Program -- Who Shall Obtain a Rap?

When a facility or remediation waste management site is owned by one person, but the treatment, storage or disposal activities are operated by another person, it is the operator's duty to obtain a RAP, except that the owner shall also sign the RAP application.

R315-270-105. Hazardous Waste Permit Program -- Who Shall Sign the Application and Any Required Reports for a Rap?

Both the owner and the operator shall sign the RAP application and any required reports according to Subsections R315-270-11(a), (b), and (c). In the application, both the owner and the operator shall also make the certification required under Subsection R315-270-11(d)(1). However, the owner may choose the alternative certification under Subsection R315-270-11(d)(2) if the operator certifies under Subsection R315-270-11(d)(1).

R315-270-110. Hazardous Waste Permit Program -- What Shall I Include in My Application for a Rap?

You shall include the following information in your application for a RAP:

(a) The name, address, and EPA identification number of the remediation waste management site;

(b) The name, address, and telephone number of the owner and operator;

(c) The latitude and longitude of the site;

(d) The United States Geological Survey (USGS) or county map showing the location of the remediation waste

management site;

(e) A scaled drawing of the remediation waste management site showing:

- (1) The remediation waste management site boundaries;
- (2) Any significant physical structures; and
- (3) The boundary of all areas on-site where remediation waste is to be treated, stored or disposed;

(f) A specification of the hazardous remediation waste to be treated, stored or disposed of at the facility or remediation waste management site. This shall include information on:

(1) Constituent concentrations and other properties of the hazardous remediation wastes that may affect how such materials should be treated and/or otherwise managed;

(2) An estimate of the quantity of these wastes; and

(3) A description of the processes you will use to treat, store, or dispose of this waste including technologies, handling systems, design and operating parameters you will use to treat hazardous remediation wastes before disposing of them according to the LDR standards of Rule R315-268, as applicable;

(g) Enough information to demonstrate that operations that follow the provisions in your RAP application will ensure compliance with applicable requirements of Rules R315-264, 266, and 268;

(h) Such information as may be necessary to enable the Director to carry out his duties as is required for permits under Subsection R315-270-14(b)(20);

(i) Any other information the Director decides is necessary for demonstrating compliance with Sections R315-270-79 through 230 or for determining any additional RAP conditions that are necessary to protect human health and the environment.

R315-270-115. Hazardous Waste Permit Program -- What If I Want to Keep This Information Confidential?

Sections 63G-2-101 through 901 allows you to claim as confidential any or all of the information you submit to the Director under Sections R315-270-79 through 230. You shall assert any such claim by following the requirements of Section 63G-2-309. If you do assert a claim at the time you submit the information, the Director shall treat the information according to the procedures in Sections 63G-2-101 through 901. If you do not assert a claim at the time you submit the information, the Director may make the information available to the public without further notice to you. The Director shall deny any requests for confidentiality of your name and/or address.

R315-270-120. Hazardous Waste Permit Program -- To Whom Shall I Submit My Rap Application?

You shall submit your application for a RAP to the Director for approval.

R315-270-125. Hazardous Waste Permit Program -- If I Submit My Rap Application as Part of Another Document, What Shall I Do?

If you submit your application for a RAP as a part of another document, you shall clearly identify the components of that document that constitute your RAP application.

R315-270-130. Hazardous Waste Permit Program -- What Is the Process for Approving or Denying My Application for a Rap?

(a) If the Director tentatively finds that your RAP application includes all of the information required by Section R315-270-110 and that your proposed remediation waste management activities meet the regulatory standards, the Director shall make a tentative decision to approve your RAP application. The Director shall then prepare a draft RAP and provide an opportunity for public comment before making a final decision on your RAP application, according to Sections

R315-270-79 through 230.

(b) If the Director tentatively finds that your RAP application does not include all of the information required by Section R315-270-110 or that your proposed remediation waste management activities do not meet the regulatory standards, the Director may request additional information from you or ask you to correct deficiencies in your application. If you fail or refuse to provide any additional information the Director requests, or to correct any deficiencies in your RAP application, the Director may make a tentative decision to deny your RAP application. After making this tentative decision, the Director shall prepare a notice of intent to deny your RAP application and provide an opportunity for public comment before making a final decision on your RAP application, according to the requirements in Sections R315-270-79 through 230. The Director may deny the RAP application either in its entirety or in part.

R315-270-135. Hazardous Waste Permit Program -- What Shall the Director Include in a Draft Rap?

If the Director prepares a draft RAP, it shall include the:

(a) Information required under Subsections R315-270-110(a) through (f);

(b) The following terms and conditions:

(1) Terms and conditions necessary to ensure that the operating requirements specified in your RAP comply with applicable requirements of Rules R315-264, 266, and 268, including any recordkeeping and reporting requirements. In satisfying this provision, the Director may incorporate, expressly or by reference, applicable requirements of Rules R315-264, 266, and 268 into the RAP or establish site-specific conditions as required or allowed by Rules R315-264, 266, and 268;

(2) Terms and conditions in Section R315-270-30;

(3) Terms and conditions for modifying, revoking and reissuing, and terminating your RAP, as provided in Section R315-270-170; and

(4) Any additional terms or conditions that the Director determines are necessary to protect human health and the environment, including any terms and conditions necessary to respond to spills and leaks during use of any units permitted under the RAP; and

(c) If the draft RAP is part of another document, as described in Subsection R315-270-80(d)(2), the Director shall clearly identify the components of that document that constitute the draft RAP.

R315-270-140. Hazardous Waste Permit Program -- What Else Shall the Director Prepare in Addition to the Draft Rap or Notice of Intent to Deny?

Once the Director has prepared the draft RAP or notice of intent to deny, he shall then:

(a) Prepare a statement of basis that briefly describes the derivation of the conditions of the draft RAP and the reasons for them, or the rationale for the notice of intent to deny;

(b) Compile an administrative record, including:

(1) The RAP application, and any supporting data furnished by the applicant;

(2) The draft RAP or notice of intent to deny;

(3) The statement of basis and all documents cited therein, material readily available at the Division's office or published material that is generally available need not be physically included with the rest of the record, as long as it is specifically referred to in the statement of basis; and

(4) Any other documents that support the decision to approve or deny the RAP; and

(c) Make information contained in the administrative record available for review by the public upon request.

R315-270-145. Hazardous Waste Permit Program -- What Are the Procedures for Public Comment on the Draft Rap or Notice of Intent to Deny?

(a) The Director shall:

- (1) Send notice to you of intent to approve or deny your RAP application, and send you a copy of the statement of basis;
- (2) Publish a notice of intent to approve or deny your RAP application in a major local newspaper of general circulation;
- (3) Broadcast intent to approve or deny your RAP application over a local radio station; and
- (4) Send a notice of intent to approve or deny your RAP application to each unit of local government having jurisdiction over the area in which your site is located, and to each State agency having any authority under State law with respect to any construction or operations at the site.

(b) The notice required by Subsection R315-270-145(a) shall provide an opportunity for the public to submit written comments on the draft RAP or notice of intent to deny within at least 45 days.

(c) The notice required by Subsection R315-270-145(a) shall include:

- (1) The name and address of the office processing the RAP application;
- (2) The name and address of the RAP applicant, and if different, the remediation waste management site or activity the RAP will regulate;
- (3) A brief description of the activity the RAP will regulate;
- (4) The name, address and telephone number of a person from whom interested persons may obtain further information, including copies of the draft RAP or notice of intent to deny, statement of basis, and the RAP application;
- (5) A brief description of the comment procedures, and any other procedures by which the public may participate in the RAP decision;
- (6) If a hearing is scheduled, the date, time, location and purpose of the hearing;
- (7) If a hearing is not scheduled, a statement of procedures to request a hearing;
- (8) The location of the administrative record, and times when it will be open for public inspection; and
- (9) Any additional information the Director considers necessary or proper.

(d) If, within the comment period, the Director receives written notice of opposition to his intention to approve or deny your RAP application and a request for a hearing, the Director shall hold an informal public hearing to discuss issues relating to the approval or denial of your RAP application. The Director may also determine on his own initiative that an informal hearing is appropriate. The hearing shall include an opportunity for any person to present written or oral comments. Whenever possible, the Director shall schedule this hearing at a location convenient to the nearest population center to the remediation waste management site and give notice according to the requirements in Subsection R315-270-145(a). This notice shall, at a minimum, include the information required by Subsection R315-270-145(c) and:

- (1) Reference to the date of any previous public notices relating to the RAP application;
- (2) The date, time and place of the hearing; and
- (3) A brief description of the nature and purpose of the hearing, including the applicable rules and procedures.

R315-270-150. Hazardous Waste Permit Program -- How Will the Director Make a Final Decision on My Rap Application?

(a) The Director shall consider and respond to any significant comments raised during the public comment period, or during any hearing on the draft RAP or notice of intent to

deny, and revise your draft RAP based on those comments, as appropriate.

(b) If the Director determines that your RAP includes the information and terms and conditions required in Section R315-270-135, then he will issue a final decision approving your RAP and, in writing, notify you and all commenters on your draft RAP that your RAP application has been approved.

(c) If the Director determines that your RAP does not include the information required in Section R315-270-135, then he will issue a final decision denying your RAP and, in writing, notify you and all commenters on your draft RAP that your RAP application has been denied.

(d) If the Director's final decision is that the tentative decision to deny the RAP application was incorrect, he will withdraw the notice of intent to deny and proceed to prepare a draft RAP, according to the requirements in Sections R315-270-79 through 230.

(e) When the Director issues a final RAP decision, the Director shall refer to the procedures for appealing the decision under Section R315-270-155.

(f) Before issuing the final RAP decision, the Director shall compile an administrative record. Material readily available at the Division office or published materials which are generally available and which are included in the administrative record need not be physically included with the rest of the record as long as it is specifically referred to in the statement of basis or the response to comments. The administrative record for the final RAP shall include information in the administrative record for the draft RAP, see Subsection R315-270-140(b), and:

- (1) All comments received during the public comment period;
 - (2) Tapes or transcripts of any hearings;
 - (3) Any written materials submitted at these hearings;
 - (4) The responses to comments;
 - (5) Any new material placed in the record since the draft RAP was issued;
 - (6) Any other documents supporting the RAP; and
 - (7) A copy of the final RAP.
- (g) The Director shall make information contained in the administrative record available for review by the public upon request.

R315-270-155. Hazardous Waste Permit Program -- May the Decision to Approve or Deny My Rap Application Be Administratively Appealed?

(a) Any commenter on the draft RAP or notice of intent to deny, or any participant in any public hearing(s) on the draft RAP, may appeal the Director's decision to approve or deny your RAP application under Section R315-124-19. Any person who did not file comments, or did not participate in any public hearing(s) on the draft RAP, may petition for administrative review only to the extent of the changes from the draft to the final RAP decision. Appeals of RAPs may be made to the same extent as for final permit decisions under Section R315-124-15 (or a decision under Section R315-270-29 to deny a permit for the active life of a hazardous waste management facility or unit).

(b) This appeal is a prerequisite to seeking judicial review of these actions.

R315-270-160. Hazardous Waste Permit Program -- When Does My Rap Become Effective?

Your RAP becomes effective 30 days after the Director notifies you and all commenters that your RAP is approved unless:

- (a) The Director specifies a later effective date in his decision;
- (b) You or another person has appealed your RAP under R315-270-155 (if your RAP is appealed, and the request for review is granted under Section R315-270-155, conditions of

your RAP are stayed according to Section R315-124-16 of this chapter); or

(c) No commenters requested a change in the draft RAP, in which case the RAP becomes effective immediately when it is issued.

R315-270-165. Hazardous Waste Permit Program -- When May I Begin Physical Construction of New Units Permitted Under the Rap?

You shall not begin physical construction of new units permitted under the RAP for treating, storing or disposing of hazardous remediation waste before receiving a finally effective RAP.

R315-270-170. Hazardous Waste Permit Program -- After My Rap Is Issued, How May it Be Modified, Revoked and Reissued, or Terminated?

In your RAP, the Director shall specify, either directly or by reference, procedures for future modifications, revocations and reissuance, or terminations of your RAP. These procedures shall provide adequate opportunities for public review and comment on any modification, revocation and reissuance, or termination that would significantly change your management of your remediation waste, or that otherwise merits public review and comment. If your RAP has been incorporated into a traditional hazardous waste permit, as allowed under Subsection R315-270-85(c), then the RAP will be modified according to the applicable requirements in Sections R315-270-40 through 42, revoked and reissued according to the applicable requirements in Sections R315-270-41 and 43, or terminated according to the applicable requirements of Section R315-270-43.

R315-270-175. Hazardous Waste Permit Program -- for What Reasons May the Director Choose to Modify My Final Rap?

(a) The Director may modify your final RAP on his own initiative only if one or more of the following reasons listed in Section R315-27-175 exist(s). If one or more of these reasons do not exist, then the Director shall not modify your final RAP, except at your request. Reasons for modification are:

(1) You made material and substantial alterations or additions to the activity that justify applying different conditions;

(2) The Director finds new information that was not available at the time of RAP issuance and would have justified applying different RAP conditions at the time of issuance;

(3) The standards or regulations on which the RAP was based have changed because of new or amended statutes, rules, or by judicial decision after the RAP was issued;

(4) If your RAP includes any schedules of compliance, the Director may find reasons to modify your compliance schedule, such as an act of God, strike, flood, or materials shortage or other events over which you as the owner/operator have little or no control and for which there is no reasonably available remedy;

(5) You are not in compliance with conditions of your RAP;

(6) You failed in the application or during the RAP issuance process to disclose fully all relevant facts, or you misrepresented any relevant facts at the time;

(7) The Director has determined that the activity authorized by your RAP endangers human health or the environment and can only be remedied by modifying; or

(8) You have notified the Director, as required in the RAP under Subsection R315-270-30(1)(3)) of a proposed transfer of a RAP.

(b) Notwithstanding any other provision in Section R315-270-175, when the Director reviews a RAP for a land disposal

facility under Section R315-270-195, he may modify the permit as necessary to assure that the facility continues to comply with the currently applicable requirements in Rules R315-124, 260 through 266 and 270.

(c) The Director shall not reevaluate the suitability of the facility location at the time of RAP modification unless new information or standards indicate that a threat to human health or the environment exists that was unknown when the RAP was issued.

R315-270-180. Hazardous Waste Permit Program -- for What Reasons May the Director Choose to Revoke and Reissue My Final Rap?

(a) The Director may revoke and reissue your final RAP on his own initiative only if one or more reasons for revocation and reissuance exist(s). If one or more reasons do not exist, then the Director shall not modify or revoke and reissue your final RAP, except at your request. Reasons for modification or revocation and reissuance are the same as the reasons listed for RAP modifications in Subsections R315-270-175(a)(5) through (8) if the Director determines that revocation and reissuance of your RAP is appropriate.

(b) The Director shall not reevaluate the suitability of the facility location at the time of RAP revocation and reissuance, unless new information or standards indicate that a threat to human health or the environment exists that was unknown when the RAP was issued.

R315-270-185. Hazardous Waste Permit Program -- for What Reasons May the Director Choose to Terminate My Final Rap, or Deny My Renewal Application?

The Director may terminate your final RAP on his own initiative, or deny your renewal application for the same reasons as those listed for RAP modifications in Subsections R315-270-175(a)(5) through (7) if the Director determines that termination of your RAP or denial of your RAP renewal application is appropriate.

R315-270-190. Hazardous Waste Permit Program -- May the Decision to Approve or Deny a Modification, Revocation and Reissuance, or Termination of My Rap Be Administratively Appealed?

(a) Any commenter on the modification, revocation and reissuance or termination, or any person who participated in any hearing(s) on these actions, may appeal the Director's decision to approve a modification, revocation and reissuance, or termination of your RAP, according to Section R315-270-155. Any person who did not file comments or did not participate in any public hearing(s) on the modification, revocation and reissuance or termination, may petition for administrative review only of the changes from the draft to the final RAP decision.

(b) Any commenter on the modification, revocation and reissuance or termination, or any person who participated in any hearing(s) on these actions, may informally appeal the Director's decision to deny a request for modification, revocation and reissuance, or termination. Any person who did not file comments, or did not participate in any public hearing(s) on the modification, revocation and reissuance or termination may petition for administrative review only of the changes from the draft to the final RAP decision.

(c) The process for informal appeals of RAPs is found in Rule R305-7

R315-270-195. Hazardous Waste Permit Program -- When Will My RAP Expire?

RAPs shall be issued for a fixed term, not to exceed 10 years, although they may be renewed upon approval by the Director in fixed increments of no more than ten years. In

addition, the Director shall review any RAP for hazardous waste land disposal five years after the date of issuance or reissuance and you or the Director shall follow the requirements for modifying your RAP as necessary to assure that you continue to comply with currently applicable requirements in Rules adopted under Section 19-6-101 through 125.

R315-270-200. Hazardous Waste Permit Program -- How May I Renew My RAP if it Is Expiring?

If you wish to renew your expiring RAP, you shall follow the process for application for and issuance of RAPs in Sections R315-270-79 through 230.

R315-270-205. Hazardous Waste Permit Program -- What Happens If I Have Applied Correctly for a Rap Renewal But Have Not Received Approval by the Time My Old Rap Expires?

If you have submitted a timely and complete application for a RAP renewal, but the Director, through no fault of yours, has not issued a new RAP with an effective date on or before the expiration date of your previous RAP, your previous RAP conditions continue in force until the effective date of your new RAP or RAP denial.

R315-270-210. Hazardous Waste Permit Program -- What Records Shall I Maintain Concerning My Rap?

You are required to keep records of:

- (a) All data used to complete RAP applications and any supplemental information that you submit for a period of at least 3 years from the date the application is signed; and
- (b) Any operating and/or other records the Director requires you to maintain as a condition of your RAP.

R315-270-215. Hazardous Waste Permit Program -- How Are Time Periods in the Requirements in Sections R315-27-79 through 230 and My Rap Computed?

(a) Any time period scheduled to begin on the occurrence of an act or event shall begin on the day after the act or event. For example, if your RAP specifies that you shall close a staging pile within 180 days after the operating term for that staging pile expires, and the operating term expires on June 1, then June 2 counts as day one of your 180 days, and you would have to complete closure by November 28.

(b) Any time period scheduled to begin before the occurrence of an act or event shall be computed so that the period ends on the day before the act or event. For example, if you are transferring ownership or operational control of your site, and wish to transfer your RAP, the new owner or operator shall submit a revised RAP application no later than 90 days before the scheduled change. Therefore, if you plan to change ownership on January 1, the new owner/operator shall submit the revised RAP application no later than October 3, so that the 90th day would be December 31.

(c) If the final day of any time period falls on a weekend or legal holiday, the time period shall be extended to the next working day. For example, if you wish to appeal the Director's decision to modify your RAP, then you shall file the appeal within 30 days after the Director has issued the final RAP decision. If the 30th day falls on Sunday, then you may submit your appeal by the Monday after. If the 30th day falls on July 4th, then you may submit your appeal by July 5th.

(d) Whenever a party or interested person has the right to or is required to act within a prescribed period after the service of notice or other paper upon him by mail, 3 days shall be added to the prescribed term. For example, if you wish to appeal the Director's decision to modify your RAP, then you shall file the appeal within 30 days after the Director has issued the final RAP decision. However, if the Director notifies you of his decision by mail, then you may have 33 days to file.

R315-270-220. Hazardous Waste Permit Program -- How May I Transfer My Rap to a New Owner or Operator?

(a) If you wish to transfer your RAP to a new owner or operator, you shall follow the requirements specified in your RAP for RAP modification to identify the new owner or operator, and incorporate any other necessary requirements. These modifications do not constitute "significant" modifications for purposes of Section R315-270-170. The new owner/operator shall submit a revised RAP application no later than 90 days before the scheduled change along with a written agreement containing a specific date for transfer of RAP responsibility between you and the new permittees.

(b) When a transfer of ownership or operational control occurs, you as the old owner or operator shall comply with the applicable requirements in Section R315-264-140 through 151 until the new owner or operator has demonstrated that he is complying with the requirements in Section R315-264-140 through 151. The new owner or operator shall demonstrate compliance with Section R315-264-140 through 151 within six months of the date of the change in ownership or operational control of the facility or remediation waste management site. When the new owner/operator demonstrates compliance with Section R315-264-140 through 151 to the Director, the Director shall notify you that you no longer need to comply with Section R315-264-140 through 151 as of the date of demonstration.

R315-270-230. Hazardous Waste Permit Program -- May I Perform Remediation Waste Management Activities Under a Rap at a Location Removed From the Area Where the Remediation Wastes Originated?

(a) You may request a RAP for remediation waste management activities at a location removed from the area where the remediation wastes originated if you believe such a location would be more protective than the contaminated area or areas in close proximity.

(b) If the Director determines that an alternative location, removed from the area where the remediation waste originated, is more protective than managing remediation waste at the area of contamination or areas in close proximity, then the Director may approve a RAP for this alternative location.

(c) You shall request the RAP, and the Director shall approve or deny the RAP, according to the procedures and requirements in Sections R315-270-79 through 230.

(d) A RAP for an alternative location shall also meet the following requirements, which the Director shall include in the RAP for such locations:

(1) The RAP for the alternative location shall be issued to the person responsible for the cleanup from which the remediation wastes originated;

(2) The RAP is subject to the expanded public participation requirements in Sections R315-124-31, 32, and 33;

(3) The RAP is subject to the public notice requirements in Subsection R315-124-10(c);

(4) The site permitted in the RAP may not be located within 61 meters or 200 feet of a fault which has had displacement in the Holocene time, you shall demonstrate compliance with this standard through the requirements in Subsection R315-270-14(b)(11), See definitions of terms in Subsection R315-264-18(a);

(e) These alternative locations are remediation waste management sites, and retain the following benefits of remediation waste management sites:

(1) Exclusion from facility-wide corrective action under Section R315-264-101; and

(2) Application of Subsection R315-264-1(j) in lieu of Sections R315-264-10 through 56.

R315-270-235. Hazardous Waste Permit Program -- Integration with Maximum Achievable Control Technology

(MACT) Standards -- Options For Incinerators, Cement Kilns, Lightweight Aggregate Kilns, Solid Fuel Boilers, Liquid Fuel Boilers and Hydrochloric Acid Production Furnaces to Minimize Emissions From Startup, Shutdown, and Malfunction Events.

(a) Facilities with existing permits

(1) Revisions to permit conditions after documenting compliance with MACT. The owner or operator of a hazardous waste-permitted incinerator, cement kiln, lightweight aggregate kiln, solid fuel boiler, liquid fuel boiler, or hydrochloric acid production furnace may request that the Director address permit conditions that minimize emissions from startup, shutdown, and malfunction events under any of the following options when requesting removal of permit conditions that are no longer applicable according to Subsections R315-264-340(b) and R315-266-100(b):

(i) Retain relevant permit conditions. Under this option, the Director shall:

(A) Retain permit conditions that address releases during startup, shutdown, and malfunction events, including releases from emergency safety vents, as these events are defined in the facility's startup, shutdown, and malfunction plan required under 40 CFR 63.1206(c)(2), which is incorporated by reference in Subsection R307-214-2(39); and

(B) Limit applicability of those permit conditions only to when the facility is operating under its startup, shutdown, and malfunction plan.

(ii) Revise relevant permit conditions.

(A) Under this option, the Director shall:

(I) Identify a subset of relevant existing permit requirements, or develop alternative permit requirements, that ensure emissions of toxic compounds are minimized from startup, shutdown, and malfunction events, including releases from emergency safety vents, based on review of information including the source's startup, shutdown, and malfunction plan, design, and operating history.

(II) Retain or add these permit requirements to the permit to apply only when the facility is operating under its startup, shutdown, and malfunction plan.

(B) Changes that may significantly increase emissions.

(I) You shall notify the Director in writing of changes to the startup, shutdown, and malfunction plan or changes to the design of the source that may significantly increase emissions of toxic compounds from startup, shutdown, or malfunction events, including releases from emergency safety vents. You shall notify the Director of such changes within five days of making such changes. You shall identify in the notification recommended revisions to permit conditions necessary as a result of the changes to ensure that emissions of toxic compounds are minimized during these events.

(II) The Director may revise permit conditions as a result of these changes to ensure that emissions of toxic compounds are minimized during startup, shutdown, or malfunction events, including releases from emergency safety vents either:

(Iii) Upon permit renewal, or, if warranted;

(Ii) By modifying the permit under Subsection R315-270-41(a) or Section R315-270-42.

(iii) Remove permit conditions. Under this option:

(A) The owner or operator shall document that the startup, shutdown, and malfunction plan required under 40 CFR 63.1206(c)(2), which is incorporated by reference in Subsection R307-214-2(39), has been approved by the Director of the Division of Air Quality under 40 CFR 63.1206(c)(2)(ii)(B), which is incorporated by reference in Subsection R307-214-2(39); and

(B) The Director shall remove permit conditions that are no longer applicable according to Subsections R315-264-340(b) and R315-266-100(b).

(2) Addressing permit conditions upon permit reissuance.

The owner or operator of an incinerator, cement kiln, lightweight aggregate kiln, solid fuel boiler, liquid fuel boiler, or hydrochloric acid production furnace that has conducted a comprehensive performance test and submitted to the Director of the Division of Air Quality a Notification of Compliance documenting compliance with the standards of Subsection R315-214-2(39), which adopts 40 CDR 63 subpart EEE by reference, may request in the application to reissue the permit for the combustion unit that the Director control emissions from startup, shutdown, and malfunction events under any of the following options:

(i) RCRA option A.

(A) Under this option, the Director shall:

(I) Include, in the permit, conditions that ensure compliance with Subsections R315-264-345(a) and 345(c) or Subsections R315-266-102(e)(1) and 102(e)(2)(iii) to minimize emissions of toxic compounds from startup, shutdown, and malfunction events, including releases from emergency safety vents; and

(II) Specify that these permit requirements apply only when the facility is operating under its startup, shutdown, and malfunction plan; or

(ii) RCRA option B.

(A) Under this option, the Director shall:

(I) Include, in the permit conditions, that ensure emissions of toxic compounds are minimized from startup, shutdown, and malfunction events, including releases from emergency safety vents, based on review of information including the source's startup, shutdown, and malfunction plan, design, and operating history; and

(II) Specify that these permit requirements apply only when the facility is operating under its startup, shutdown, and malfunction plan.

(B) Changes that may significantly increase emissions.

(I) You shall notify the Director in writing of changes to the startup, shutdown, and malfunction plan or changes to the design of the source that may significantly increase emissions of toxic compounds from startup, shutdown, or malfunction events, including releases from emergency safety vents. You shall notify the Director of such changes within five days of making such changes. You shall identify in the notification recommended revisions to permit conditions necessary as a result of the changes to ensure that emissions of toxic compounds are minimized during these events.

(II) The Director may revise permit conditions as a result of these changes to ensure that emissions of toxic compounds are minimized during startup, shutdown, or malfunction events, including releases from emergency safety vents either:

(Iii) Upon permit renewal, or, if warranted;

(Ii) By modifying the permit under Subsection R315-270-41(a) or Section R315-270-42; or

(iii) CAA option. Under this option:

(A) The owner or operator shall document that the startup, shutdown, and malfunction plan required under 40 CFR 63.1206(c)(2), which is incorporated by reference in Subsection R307-214-2(39), has been approved by the Director of the Division of Air Quality under 40 CFR 63.1206(c)(2)(ii)(B), which is incorporated by reference in Subsection R307-214-2(39); and

(B) The Director shall omit from the permit conditions that are not applicable under Subsections R315-264-340(b) and R315-266-100(b).

(b) Interim status facilities

(1) Interim status operations. In compliance with Section R315-265-340 and Subsection R315-266-100(b), the owner or operator of an incinerator, cement kiln, lightweight aggregate kiln, solid fuel boiler, liquid fuel boiler, or hydrochloric acid production furnace that is operating under the interim status standards of Rule R315-265 or 266 may control emissions of

toxic compounds during startup, shutdown, and malfunction events under either of the following options after conducting a comprehensive performance test and submitting to the Director of the Division of Air Quality a Notification of Compliance documenting compliance with the standards of Subsection R307-214-2(39), which adopts 40 CFR 63 subpart EEE by reference.

(i) RCRA option. Under this option, the owner or operator continues to comply with the interim status emission standards and operating requirements of Rules R315-265 or 266 relevant to control of emissions from startup, shutdown, and malfunction events. Those standards and requirements apply only during startup, shutdown, and malfunction events; or

(ii) CAA option. Under this option, the owner or operator is exempt from the interim status standards of Rules R315-265 or 266 relevant to control of emissions of toxic compounds during startup, shutdown, and malfunction events upon submission of written notification and documentation to the Director that the startup, shutdown, and malfunction plan required under 40 CFR 63.1206(c)(2), which is incorporated by reference in Subsection R307-214-2(39), has been approved by the Director of the Division of Air Quality under 40 CFR 63.1206(c)(2)(ii)(B), which is incorporated by reference in Subsection R307-214-2(39).

(2) Operations under a subsequent RCRA permit. When an owner or operator of an incinerator, cement kiln, lightweight aggregate kiln, solid fuel boiler, liquid fuel boiler, or hydrochloric acid production furnace that is operating under the interim status standards of Rules R315-265 or 266 submits a RCRA permit application, the owner or operator may request that the Director control emissions from startup, shutdown, and malfunction events under any of the options provided by Subsection R315-270-235(a)(2)(i), (a)(2)(ii), or (a)(2)(iii).

(c) New units. Hazardous waste incinerator, cement kiln, lightweight aggregate kiln, solid fuel boiler, liquid fuel boiler, or hydrochloric acid production furnace units that become subject to hazardous waste permit requirements after October 12, 2005 shall control emissions of toxic compounds during startup, shutdown, and malfunction events under either of the following options:

(1) Comply with the requirements specified in 40 CFR 63.1206(c)(2), which is incorporated by reference in Subsection R307-214-2(39); or

(2) Request to include in the hazardous waste permit, conditions that ensure emissions of toxic compounds are minimized from startup, shutdown, and malfunction events, including releases from emergency safety vents, based on review of information including the source's startup, shutdown, and malfunction plan and design. The Director shall specify that these permit conditions apply only when the facility is operating under its startup, shutdown, and malfunction plan.

KEY: hazardous waste
August 31, 2017

19-6-105
19-6-106

R315. Environmental Quality, Waste Management and Radiation Control, Waste Management.**R315-273. Standards for Universal Waste Management.****R315-273-1. Standards for Universal Waste Management -- Scope.**

(a) Rule R315-273 establishes requirements for managing the following:

- (1) Batteries as described in Section R315-273-2;
- (2) Pesticides as described in Section R315-273-3;
- (3) Mercury-containing equipment as described in Section R315-273-4;
- (4) Lamps as described in Section R315-273-5;
- (5) Antifreeze as described in Subsection R315-273-6(a);

and

- (6) Aerosol cans as described in Subsection R315-273-6(b).

(b) Rule R315-273 provides an alternative set of management standards in lieu of regulation under Rules R315-260 through 266, 268, and 270. If a waste handler chooses to manage its universal waste under the Rule R315-273, but fails to meet requirements in this rule, the waste handler remains subject to, and shall comply with, all applicable requirements of Rules R315-260 through 266, 268, 270 and 124.

Note: Only wastes that are hazardous, i.e., are listed or exhibit one or more characteristics of hazardous waste, are subject to the Rule R315-273 universal waste regulations. Compliance with the reduced set of Rule R315-273 requirements is an option that waste handlers may choose for managing their universal wastes, batteries, pesticides, mercury-containing devices, aerosol cans, lamps, and antifreeze. If universal waste handlers wish, they may instead continue to manage these hazardous wastes under the full hazardous waste regulations for generators, transporters, and treatment, storage, and disposal facilities.

R315-273-2. Standards for Universal Waste Management -- Applicability-Batteries.

(a) Batteries covered under Section R315-273.

(1) The requirements of Rule R315-273 apply to persons managing batteries, as described in Section R315-273-9, except those listed in Section R315-273-2(b).

(2) Spent lead-acid batteries which are not managed under Section R315-266-80 are subject to management under Rule R315-273.

(b) Batteries not covered under Rule R315-273. The requirements of Rule R315-273 do not apply to persons managing the following batteries:

(1) Spent lead-acid batteries that are managed under Section R315-266-80.

(2) Batteries, as described in Section R315-273-9, that are not yet wastes under Rule R315-261, including those that do not meet the criteria for waste generation in Subsection R315-273-2(c).

(3) Batteries, as described in Section R315-273-9 that are not hazardous waste. A battery is a hazardous waste if it exhibits one or more of the characteristics identified in Sections R315-261-20 through 24.

(c) Generation of waste batteries.

(1) A used battery becomes a waste on the date it is discarded, e.g., when sent for reclamation.

(2) An unused battery becomes a waste on the date the handler decides to discard it.

R315-273-3. Standards for Universal Waste Management -- Applicability-Pesticides.

(a) Pesticides covered under Rule R315-273. The requirements of Rule R315-273 apply to persons managing pesticides, as described in Section R315-273-9, meeting the following conditions, except those listed in Subsection R315-

273-3(b):

(1) Recalled pesticides that are:

(i) Stocks of a suspended and canceled pesticide that are part of a voluntary or mandatory recall under FIFRA Section 19(b), including, but not limited to those owned by the registrant responsible for conducting the recall; or

(ii) Stocks of a suspended or cancelled pesticide, or a pesticide that is not in compliance with FIFRA, that are part of a voluntary recall by the registrant.

(2) Stocks of other unused pesticide products that are collected and managed as part of a waste pesticide collection program.

(b) Pesticides not covered under Rule R315-273. The requirements of Rule R315-273 do not apply to persons managing the following pesticides:

(1) Recalled pesticides described in Subsection R315-273-3(a)(1), and unused pesticide products described in Subsection R315-273-3(a)(2), that are managed by farmers in compliance with Section R315-262-70. Section R315-262-70 addresses pesticides disposed of on the farmer's own farm in a manner consistent with the disposal instructions on the pesticide label, providing the container is triple rinsed in accordance with Subsection R315-261-7(b)(3);

(2) Pesticides not meeting the conditions set forth in Subsection R315-273-3(a). These pesticides shall be managed in compliance with the hazardous waste regulations in Rules R315-260 through 266, 268, and 270;

(3) Pesticides that are not wastes under Rule R315-261, including those that do not meet the criteria for waste generation in Subsection R315-273-3(c) or those that are not wastes as described in Subsection R315-273-3(d); and

(4) Pesticides that are not hazardous waste. A pesticide is a hazardous waste if it is listed in Sections R315-261-30 through 35 or if it exhibits one or more of the characteristics identified in Sections R315-261-20 through 24.

(c) When a pesticide becomes a waste.

(1) A recalled pesticide described in Subsection R315-273-3(a)(1) becomes a waste on the first date on which both of the following conditions apply:

(i) The generator of the recalled pesticide agrees to participate in the recall; and

(ii) The person conducting the recall decides to discard, e.g., burn the pesticide for energy recovery.

(2) An unused pesticide product described in Subsection R315-273-3(a)(2) becomes a waste on the date the generator decides to discard it.

(d) Pesticides that are not wastes. The following pesticides are not wastes:

(1) Recalled pesticides described in Subsection R315-273-3(a)(1), provided that the person conducting the recall:

(i) Has not made a decision to discard, e.g., burn for energy recovery, the pesticide. Until such a decision is made, the pesticide does not meet the definition of "solid waste" under Section R315-261.2; thus the pesticide is not a hazardous waste and is not subject to hazardous waste requirements, including Rule R315-273. This pesticide remains subject to the requirements of FIFRA; or

(ii) Has made a decision to use a management option that, under Section R315-261-2, does not cause the pesticide to be a solid waste; i.e., the selected option is use, other than use constituting disposal, or reuse, other than burning for energy recovery, or reclamation. Such a pesticide is not a solid waste and therefore is not a hazardous waste, and is not subject to the hazardous waste requirements including Rule R315-273. This pesticide, including a recalled pesticide that is exported to a foreign destination for use or reuse, remains subject to the requirements of FIFRA.

(2) Unused pesticide products described in Subsection R315-273-3(a)(2), if the generator of the unused pesticide

product has not decided to discard, e.g., burn for energy recovery, them. These pesticides remain subject to the requirements of FIFRA.

R315-273-4. Standards for Universal Waste Management -- Applicability -- Mercury-Containing Equipment.

(a) Mercury-containing equipment covered under Rule R315-273. The requirements of Rule R315-273 apply to persons managing mercury-containing equipment, as described in Section R315-273-9, except those listed in Subsection R315-273-4(b).

(b) Mercury-containing equipment not covered under Rule R315-273. The requirements of Rule R315-273 do not apply to persons managing the following mercury-containing equipment:

(1) Mercury-containing equipment that is not yet a waste under Rule R315-261. Subsection R315-273-4(c) describes when mercury-containing equipment becomes a waste;

(2) Mercury-containing equipment that is not a hazardous waste. Mercury-containing equipment is a hazardous waste if it exhibits one or more of the characteristics identified in Sections R315-261-20 through 24 or is listed in Sections R315-261-30 through 35; and

(3) Equipment and devices from which the mercury-containing components have been removed.

(c) Generation of waste mercury-containing equipment.

(1) Used mercury-containing equipment becomes a waste on the date it is discarded.

(2) Unused mercury-containing equipment becomes a waste on the date the handler decides to discard it.

R315-273-5. Standards for Universal Waste Management -- Applicability-Lamps.

(a) Lamps covered under Rule R315-273. The requirements of Rule R315-273 apply to persons managing lamps as described in Section R315-273-9, except those listed in Subsection R315-273-5(b).

(b) Lamps not covered under Rule R315-273. The requirements of Rule R315-273 do not apply to persons managing the following lamps:

(1) Lamps that are not yet wastes under Rule R315-261 as provided in Subsection R315-273-5(c).

(2) Lamps that are not hazardous waste. A lamp is a hazardous waste if it exhibits one or more of the characteristics identified in Sections R315-261-20 through 24.

(c) Generation of waste lamps.

(1) A used lamp becomes a waste on the date it is discarded, e.g., sent for reclamation.

(2) An unused lamp becomes a waste on the date the handler decides to discard it.

R315-273-6. Standards for Universal Waste Management -- Applicability for Utah Specific Wastes.

(a) Antifreeze.

(1) The requirements of Rule R315-273 apply to persons managing antifreeze, as described in Section R315-273-9, except those listed in Subsection R315-273-6(a)(2).

(2) Antifreeze not covered under Rule R315-273. The requirements of Rule R315-273 do not apply to persons managing the following antifreeze:

(i) Antifreeze, as described in Section R315-273-9, that is not yet a waste under Rule R315-261, including antifreeze that does not meet the criteria for waste generation in Subsection R315-273-6(a)(4).

(ii) Antifreeze, as described in Section R315-273-9 that is not hazardous waste. Antifreeze is a hazardous waste if it exhibits one or more of the characteristics identified in Sections R315-261-20 through 24.

(4) Generation of waste antifreeze.

(i) Antifreeze becomes a waste on the date it is discarded,

e.g., when sent for reclamation.

(ii) Antifreeze becomes a waste on the date the handler decides to discard it.

(b) Aerosol Cans

(1) The requirements of Rule R315-273 apply to persons managing aerosol cans, as described in Section R315-273-9, except those listed in Subsection R315-273-6(b)(2).

(2) Aerosol cans not covered under Rule R315-273. The requirements of Rule R315-273 do not apply to persons managing the following aerosol cans:

(i) Aerosol cans, as described in Section R315-273-9, that are not yet wastes under Rule R315-261, including those that do not meet the criteria for waste generation in subsection R315-273(b)(3).

(ii) Aerosol cans, as described in Section R315-273-9, that are not hazardous waste. An aerosol can shall be managed as a hazardous waste if the can or its contents exhibit one or more of the characteristics identified in Sections R315-261-20 through 24, or if its contents are listed in Sections R315-261-30 through 35.

(3) Generation of waste aerosol cans.

(i) An aerosol can becomes a waste on the date it is discarded or is no longer useable. For purposes of Rule R315-273, an aerosol can is considered to be no longer useable when:

(A) the can is as empty as proper work practices allow;

(B) the spray mechanism no longer operates as designed;

(C) the propellant is spent; or

(D) the product is no longer used.

(ii) An unused aerosol can becomes a waste on the date the handler decides to discard it.

R315-273-8. Standards for Universal Waste Management -- Applicability -- Household and Very Small Quantity Generator Waste.

(a) Persons managing the wastes listed below may, at their option, manage them under the requirements of Rule R315-273:

(1) Household wastes that are exempt under Subsection R315-261-4(b)(1) and are also of the same type as the universal wastes defined at Section R315-273-9; and/or

(2) Very small quantity generator wastes that are exempt under Section R315-262-14 and are also of the same type as the universal wastes defined at Section R315-273-9.

(b) Persons who commingle the wastes described in Subsections R315-273-8(a)(1) and (a)(2) together with universal waste regulated under Rule R315-273 shall manage the commingled waste under the requirements of Rule R315-273.

R315-273-9. Standards for Universal Waste Management -- Definitions.

(a) "Aerosol can" means a container with a total capacity of no more than 24 ounces of gas under pressure and is used to aerate and dispense any material through a valve in the form of a spray or foam.

(b) "Ampule" means an airtight vial made of glass, plastic, metal, or any combination of these materials.

(c) "Antifreeze" means an ethylene glycol based mixture that lowers the freezing point of water and is used as an engine coolant.

(d) "Battery" means a device consisting of one or more electrically connected electrochemical cells, which is designed to receive, store, and deliver electric energy. An electrochemical cell is a system consisting of an anode, cathode, and an electrolyte, plus such connections, electrical and mechanical, as may be needed to allow the cell to deliver or receive electrical energy. The term battery also includes an intact, unbroken battery from which the electrolyte has been removed.

(e) "Destination facility" means a facility that treats, disposes of, or recycles a particular category of universal waste,

except those management activities described in Subsections R315-273-13(a) and (c) and Subsections R315-273-33(a) and (c). A facility, at which a particular category of universal waste is only accumulated, is not a destination facility for purposes of managing that category of universal waste.

(f) "Drum-top lamp crusher" means a device attached to a drum or container that mechanically reduces the size of lamps and includes a bag filter followed in series by a HEPA filter and an activated carbon filter. Drum-top crushers are the only devices that can be approved for the use of crushing lamps.

(g) "FIFRA" means the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136-136y).

(h) "Generator" means any person, by site, whose act or process produces hazardous waste identified or listed in Rule R315-261 or whose act first causes a hazardous waste to become subject to regulation.

(i) "Lamp," also referred to as "universal waste lamp" is defined as the bulb or tube portion of an electric lighting device. A lamp is specifically designed to produce radiant energy, most often in the ultraviolet, visible, and infra-red regions of the electromagnetic spectrum. Examples of common universal waste electric lamps include, but are not limited to, fluorescent, high intensity discharge, neon, mercury vapor, high pressure sodium, and metal halide lamps.

(j) "Large Quantity Handler of Universal Waste" means a universal waste handler, as defined in Section R315-273-9 who accumulates 5,000 kilograms or more total of universal waste; batteries, pesticides, mercury-containing equipment, lamps, or any other universal waste regulated in Rule R315-273, calculated collectively; at any time. This designation as a large quantity handler of universal waste is retained through the end of the calendar year in which the 5,000 kilogram limit is met or exceeded.

(k) "Mercury-containing equipment" means a device or part of a device, including thermostats, but excluding batteries and lamps, that contains elemental mercury integral to its function.

(l) "On-site" means the same or geographically contiguous property which may be divided by public or private right-of-way, provided that the entrance and exit between the properties is at a cross-roads intersection, and access is by crossing as opposed to going along the right of way. Non-contiguous properties owned by the same person but connected by a right-of-way which he controls and to which the public does not have access, are also considered on-site property.

(m) "Pesticide" means any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, or intended for use as a plant regulator, defoliant, or desiccant, other than any article that:

(1) Is a new animal drug under FFDCA section 201(w), or

(2) Is an animal drug that has been determined by regulation of the Secretary of Health and Human Services not to be a new animal drug, or

(3) Is an animal feed under FFDCA section 201(x) that bears or contains any substances described by (1) or (2) above.

(n) "Small Quantity Handler of Universal Waste" means a universal waste handler, as defined in this Section R315-273-9 who does not accumulate 5,000 kilograms or more of universal waste at any time.

(o) "Thermostat" means a temperature control device that contains metallic mercury in an ampule attached to a bimetal sensing element, and mercury-containing ampules that have been removed from these temperature control devices in compliance with the requirements of Subsection R315-273-13(c)(2) or 33(c)(2).

(p) "Universal Waste" means any of the following hazardous wastes that are subject to the universal waste requirements of Rule R315-273:

(1) Batteries as described in Section R315-273-2;

(2) Pesticides as described in Section R315-273-3;

(3) Mercury-containing equipment as described in Section R315-273-4;

(4) Lamps as described in Section R315-273-5;

(5) Antifreeze as described in Subsection R315-273-6(a); and

(6) Aerosol cans as described in Subsection R315-273-6(b).

(q) "Universal Waste Handler:"

(1) Means:

(i) A generator, as defined in Section R315-273-9, of universal waste; or

(ii) The owner or operator of a facility, including all contiguous property, that receives universal waste from other universal waste handlers, accumulates universal waste, and sends universal waste to another universal waste handler, to a destination facility, or to a foreign destination.

(2) Does not mean:

(i) A person who treats, except under the provisions of Subsection R315-273-13(a) or (c), or 33(a) or (c), disposes of, or recycles universal waste; or

(ii) A person engaged in the off-site transportation of universal waste by air, rail, highway, or water, including a universal waste transfer facility.

(r) "Universal Waste Transfer Facility" means any transportation-related facility including loading docks, parking areas, storage areas and other similar areas where shipments of universal waste are held during the normal course of transportation for ten days or less.

(s) "Universal Waste Transporter" means a person engaged in the off-site transportation of universal waste by air, rail, highway, or water.

R315-273-10. Standards for Universal Waste Management, Standards for Small Quantity Handlers of Universal Waste -- Applicability.

Sections R315-273-10 through 20 apply to small quantity handlers of universal waste, as defined in Section R315-273-9 except that the registration requirement of Subsection R315-273-13(d)(3) and Subsections R315-273-13(d)(6) and (7) do not apply to generators.

R315-273-11. Standards for Universal Waste Management, Standards for Small Quantity Handlers of Universal Waste -- Prohibitions.

A small quantity handler of universal waste is:

(a) Prohibited from disposing of universal waste; and

(b) Prohibited from diluting or treating universal waste, except by responding to releases as provided in Section R315-273-17; or by managing specific wastes as provided in Section R315-273-13.

R315-273-12. Standards for Universal Waste Management, Standards for Small Quantity Handlers of Universal Waste -- Notification.

A small quantity handler of universal waste is not required to notify the Director of universal waste handling activities except as required under Subsection R315-273-13(3).

R315-273-13. Standards for Universal Waste Management, Standards for Small Quantity Handlers of Universal Waste -- Waste Management.

(a) Batteries. A small quantity handler of universal waste shall manage universal waste batteries in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

(1) A small quantity handler of universal waste shall contain any universal waste battery that shows evidence of leakage, spillage, or damage that could cause leakage under

reasonably foreseeable conditions in a container. The container shall be closed, structurally sound, compatible with the contents of the battery, and shall lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

(2) A small quantity handler of universal waste may conduct the following activities as long as the casing of each individual battery cell is not breached and remains intact and closed, except that cells may be opened to remove electrolyte but shall be immediately closed after removal:

- (i) Sorting batteries by type;
- (ii) Mixing battery types in one container;
- (iii) Discharging batteries so as to remove the electric charge;
- (iv) Regenerating used batteries;
- (v) Disassembling batteries or battery packs into individual batteries or cells;
- (vi) Removing batteries from consumer products; or
- (vii) Removing electrolyte from batteries.

(3) A small quantity handler of universal waste who removes electrolyte from batteries, or who generates other solid waste, e.g., battery pack materials, discarded consumer products, as a result of the activities listed above, shall determine whether the electrolyte and/or other solid waste exhibit a characteristic of hazardous waste identified in Sections R315-261-20 through 24.

(i) If the electrolyte and/or other solid waste exhibit a characteristic of hazardous waste, it is subject to all applicable requirements of Rules R315-260 through 266, 268 and 270. The handler is considered the generator of the hazardous electrolyte and/or other waste and is subject to Rule R315-262.

(ii) If the electrolyte or other solid waste is not hazardous, the handler may manage the waste in any way that is in compliance with applicable federal, state or local solid waste regulations.

(b) Pesticides. A small quantity handler of universal waste shall manage universal waste pesticides in a way that prevents releases of any universal waste or component of a universal waste to the environment. The universal waste pesticides shall be contained in one or more of the following:

(1) A container that remains closed, structurally sound, compatible with the pesticide, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions; or

(2) A container that does not meet the requirements of Subsection R315-273-13(b)(1), provided that the unacceptable container is overpacked in a container that does meet the requirements of Subsection R315-273-13(b)(1); or

(3) A tank that meets the requirements of 40 CFR 265.190 through 202, except for 40 CFR 265.197(c) and 40 CFR 265.200 and 201, 40 CFR 265 is adopted by reference in R315-265; or

(4) A transport vehicle or vessel that is closed, structurally sound, compatible with the pesticide, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

(c) Mercury-containing equipment. A small quantity handler of universal waste shall manage universal waste mercury-containing equipment in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

(1) A small quantity handler of universal waste shall place in a container any universal waste mercury-containing equipment with non-contained elemental mercury or that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions. The container shall be closed, structurally sound, compatible with the contents of the device, shall lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable

conditions, and shall be reasonably designed to prevent the escape of mercury into the environment by volatilization or any other means.

(2) A small quantity handler of universal waste may remove mercury-containing ampules from universal waste mercury-containing equipment provided the handler:

(i) Removes and manages the ampules in a manner designed to prevent breakage of the ampules;

(ii) Removes the ampules only over or in a containment device, e.g., tray or pan sufficient to collect and contain any mercury released from an ampule in case of breakage;

(iii) Ensures that a mercury clean-up system is readily available to immediately transfer any mercury resulting from spills or leaks from broken ampules from that containment device to a container that meets the requirements of Section R315-262-34;

(iv) Immediately transfers any mercury resulting from spills or leaks from broken ampules from the containment device to a container that meets the requirements of Section R315-262-34;

(v) Ensures that the area in which ampules are removed is well ventilated and monitored to ensure compliance with applicable OSHA exposure levels for mercury;

(vi) Ensures that employees removing ampules are thoroughly familiar with proper waste mercury handling and emergency procedures, including transfer of mercury from containment devices to appropriate containers;

(vii) Stores removed ampules in closed, non-leaking containers that are in good condition;

(viii) Packs removed ampules in the container with packing materials adequate to prevent breakage during storage, handling, and transportation;

(3) A small quantity handler of universal waste mercury-containing equipment that does not contain an ampule may remove the open original housing holding the mercury from universal waste mercury-containing equipment provided the handler:

(i) Immediately seals the original housing holding the mercury with an air-tight seal to prevent the release of any mercury to the environment; and

(ii) Follows all requirements for removing ampules and managing removed ampules under Subsection R315-273-13(c)(2); and

(4)(i) A small quantity handler of universal waste who removes mercury-containing ampules from mercury-containing equipment or seals mercury from mercury-containing equipment in its original housing shall determine whether the following exhibit a characteristic of hazardous waste identified in Sections R315-261-20 through 24:

(A) Mercury or clean-up residues resulting from spills or leaks; and/or

(B) Other solid waste generated as a result of the removal of mercury-containing ampules or housings, e.g., the remaining mercury-containing device.

(ii) If the mercury, residues, and/or other solid waste exhibits a characteristic of hazardous waste, it shall be managed in compliance with all applicable requirements of Rules R315-260 through 266, 268, and 270. The handler is considered the generator of the mercury, residues, and/or other waste and shall manage it in compliance with Rule R315-262.

(iii) If the mercury, residues, and/or other solid waste is not hazardous, the handler may manage the waste in any way that is in compliance with applicable federal, state or local solid waste regulations.

(d) Lamps. A small quantity handler of universal waste shall manage lamps in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

(1) A small quantity handler of universal waste shall

contain any lamp in containers or packages that are structurally sound, adequate to prevent breakage, and compatible with the contents of the lamps. Such containers and packages shall remain closed and shall lack evidence of leakage, spillage or damage that could cause leakage under reasonably foreseeable conditions.

(2) A small quantity handler of universal waste shall immediately clean up and place in a container any lamp that is broken and shall place in a container any lamp that shows evidence of breakage, leakage, or damage that could cause the release of mercury or other hazardous constituents to the environment. Containers shall be closed, structurally sound, compatible with the contents of the lamps and shall lack evidence of leakage, spillage or damage that could cause leakage or releases of mercury or other hazardous constituents to the environment under reasonably foreseeable conditions.

(3) A small quantity handler of universal waste may crush universal waste lamps using a drum-top lamp crusher designed specifically for crushing lamps provided that the small quantity handler submits a drum-top lamp crusher registration application to and receives approval from the Director. The registration application shall demonstrate that the small quantity handler shall operate the drum-top lamp crusher to ensure the following:

(i) The lamps are crushed in a closed accumulation container designed specifically for crushing lamps;

(ii) The lamps are crushed in a controlled manner that prevents the release of mercury vapor or other contaminants in exceedance of the manufacturer's specifications;

(iii) The drum-top lamp crusher shall consist of a bag filter followed in series by a HEPA filter and an activated carbon filter;

(iv) The drum-top lamp crusher is installed, maintained, and operated in accordance with written procedures developed by the manufacturer of the equipment including specific instructions for the frequency of filter changes;

(v) Filters are either characterized to demonstrate that they are not a hazardous waste or managed as a hazardous waste;

(vi) A spill clean-up kit is available;

(vii) The area in which the drum-top crusher is operated is well ventilated and monitored to ensure compliance with applicable OSHA exposure levels for mercury;

(viii) An employee using the drum-top lamp crusher is trained annually on the written operating, safety, personal protection and maintenance procedures of the system;

(ix) An employee using the drum-top lamp crusher is trained annually in emergency procedures;

(x) An operating record is kept and consists of the following:

(A) the number and size of lamps crushed per calendar day, per calendar month, and per calendar year;

(B) the schedule for the change out of filters;

(C) date and time of filter change out;

(D) date, type, and time of equipment maintenance;

(E) any occurrence of equipment malfunction; and

(F) procedures for preventing equipment malfunctions.

(4) The operating record shall be maintained for at least three years.

(5) When a drum-top crusher is no longer used or is relocated, the area where the crusher was located shall be decontaminated of all mercury and other contaminants caused by the use of the drum-top lamp crusher. A report documenting the decontamination steps as well as supporting analytical data demonstrating successful remediation shall be submitted to the Director for approval within 30 days following completion of decontamination.

(6) The small quantity handler shall provide a closure plan along with a detailed written estimate, in current dollars, of the cost of disposing of the drum-top lamp crusher; decontamination

of the area surrounding the drum-top lamp crusher, and any analytical costs required to show that decontamination is complete. Drum-top lamp crushers operated by the state or the federal government are exempt from the cost estimate requirement of Subsection R315-273-13(d)(6).

(7) The small quantity handler shall demonstrate financial assurance for the detailed cost estimates determined in Subsection R315-273-13(d)(6) using one of the options in Subsections R315-261-143(a) through (e). Drum-top lamp crushers operated by the state or the federal government are exempt from the financial assurance requirement of Subsection R315-273-13(d)(7).

(8) Crushed universal waste lamps may be managed as universal waste lamps under Rule R315-273 or they may be managed as hazardous waste in accordance with all applicable requirements of Rules R315-260 through 266 and 268.

(e) Antifreeze. A small quantity handler of universal waste shall manage universal waste antifreeze in a way that prevents releases of any universal waste or component of a universal waste to the environment. The universal waste antifreeze shall be contained in one or more of the following:

(1) A container that remains closed, structurally sound, compatible with the antifreeze, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions; or

(2) A container that does not meet the requirements of Subsection R315-273-13(e)(1), provided that the unacceptable container is overpacked in a container that does meet the requirements of Subsection R315-273-13(e)(1); or

(3) A tank that meets the requirements of 40 CFR 265.190 through 202, except for 40 CFR 265.197(c) and 40 CFR 265.200 and 201, 40 CFR 265 is adopted by reference in R315-265; or

(4) A transport vehicle or vessel that is closed, structurally sound, compatible with the antifreeze, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

(f) Aerosol cans. A small quantity handler of universal waste shall manage universal waste aerosol cans in a way that prevents release of any universal waste or component of a universal waste or accelerant to the environment as follows:

(1) A small quantity handler of universal waste shall immediately contain any universal waste aerosol can that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions in a separate individual container. The individual container shall be closed, structurally sound, compatible with the contents of the universal waste aerosol can, and shall lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

(2) A small quantity handler of universal waste may accumulate universal waste aerosol cans in a specially designated accumulation container provided it is clearly marked for such use. The accumulation container shall be closed, structurally sound, compatible with the contents of the universal waste aerosol can, and shall lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions. The universal waste aerosol cans shall be sorted by type and compatibility of contents to ensure that incompatible materials are segregated and managed appropriately in separate accumulation containers.

(3) A small quantity handler of universal waste may puncture universal waste aerosol cans to remove and collect the contents of the aerosol can provided the handler:

(i) Ensures that the universal waste aerosol can is punctured in a manner designed to prevent the release of any universal waste or component of universal waste or accelerant to the environment;

(ii) Ensures that the puncturing operations are performed

safely by developing and implementing a written procedure detailing how to safely puncture universal waste aerosol cans. This procedure shall include:

- (A) the type of equipment to be used to puncture the universal waste aerosol cans safely;
- (B) operation and maintenance of the unit;
- (C) segregation of incompatible wastes;
- (D) proper waste management practices, i.e., ensuring that flammable wastes are stored away from heat or open flames; and
- (E) waste characterization;
- (iii) Ensures that a spill clean-up kit is readily available to immediately clean up spills or leaks of the contents of the universal waste aerosol can which may occur during the can-puncturing operation;
- (iv) Immediately transfers the contents of the universal waste aerosol can, or puncturing device if applicable, to a container that meets the requirements of Section R315-262-34;
- (v) Ensures that the area in which the universal waste aerosol cans are punctured is well ventilated; and
- (vi) Ensures that employees are thoroughly familiar with the procedure for sorting and puncturing universal waste aerosol cans, and proper waste handling and emergency procedures, relevant to their responsibilities during normal facility operations and emergencies.

(4)(i) A small quantity handler of universal waste who punctures universal waste aerosol cans to remove the contents of the aerosol can, or who generates other solid waste as a result of the activities listed above, shall determine whether the contents of the universal waste aerosol can, residues and/or other solid wastes exhibit a characteristic of hazardous waste identified in Sections R315-261-20 through 24, or are listed as a hazardous waste identified in Sections R315-261-30 through 35.

(ii) If the contents of the universal waste aerosol can, residues and/or other solid waste exhibit a characteristic of hazardous waste or are listed hazardous wastes, they shall be managed in compliance with all applicable requirements of Rules R315-260 through 266, 268, 270 and 124. The handler is considered the generator of the contents of the universal waste aerosol can, residues, and/or other waste and is subject to the requirements of Rule R315-262. In addition to the Rule R315-262 labeling requirements, the container used to accumulate, store, or transport the hazardous waste contents removed from the punctured universal waste aerosol can shall be labeled with all applicable EPA Hazardous Waste Codes found in Sections R315-261-20 through 24 and Sections R315-261-30 through 35.

(iii) If the contents of the universal waste aerosol can, residues, and/or other solid waste are not hazardous, the handler may manage the waste in a way that is in compliance with applicable federal, state or local solid waste regulations.

R315-273-14. Standards for Universal Waste Management, Standards for Small Quantity Handlers of Universal Waste -- Labeling/Marking.

A small quantity handler of universal waste shall label or mark the universal waste to identify the type of universal waste as specified below:

(a) Universal waste batteries, i.e., each battery, or a container in which the batteries are contained, shall be labeled or marked clearly with any one of the following phrases: "Universal Waste-Battery(ies)," or "Waste Battery(ies)," or "Used Battery(ies);"

(b) A container, or multiple container package unit, tank, transport vehicle or vessel in which recalled universal waste pesticides as described in Subsection R315-273-3(a)(1) are contained shall be labeled or marked clearly with:

- (1) The label that was on or accompanied the product as sold or distributed; and
- (2) The words "Universal Waste-Pesticide(s)" or "Waste-

Pesticide(s);"

(c) A container, tank, or transport vehicle or vessel in which unused pesticide products as described in Subsection R315-273-3(a)(2) are contained shall be labeled or marked clearly with:

(1)(i) The label that was on the product when purchased, if still legible;

(ii) If using the labels described in Subsection R315-273-14(c)(1)(i) is not feasible, the appropriate label as required under the Department of Transportation regulation 49 CFR part 172;

(iii) If using the labels described in Subsections R315-273-14(c)(1)(i) and (ii) is not feasible, another label prescribed or designated by the waste pesticide collection program administered or recognized by a state; and

(2) The words "Universal Waste-Pesticide(s)" or "Waste-Pesticide(s)."

(d)(1) Universal waste mercury-containing equipment, i.e., each device, or a container in which the equipment is contained, shall be labeled or marked clearly with any of the following phrases: "Universal Waste-Mercury Containing Equipment," "Waste Mercury-Containing Equipment," or "Used Mercury-Containing Equipment."

(2) A universal waste mercury-containing thermostat or container containing only universal waste mercury-containing thermostats may be labeled or marked clearly with any of the following phrases: "Universal Waste-Mercury Thermostat(s)," "Waste Mercury Thermostat(s)," or "Used Mercury Thermostat(s)."

(e) Each lamp or a container or package in which such lamps are contained shall be labeled or marked clearly with one of the following phrases: "Universal Waste-Lamp(s)," or "Waste Lamp(s)," or "Used Lamp(s)."

(f) A container, tank, or transport vehicle or vessel in which antifreeze is contained shall be labeled or marked clearly with the words "Universal Waste- antifreeze" or "Waste-antifreeze."

(g) Universal waste aerosol cans, i.e., each can, or a container in which the universal waste aerosol cans are contained or accumulated, shall be labeled or marked clearly with any one of the following phrases: "Universal Waste-Aerosol Can(s)," or "Waste Aerosol Can(s)".

R315-273-15. Standards for Universal Waste Management, Standards for Small Quantity Handlers of Universal Waste -- Accumulation Time Limits.

(a) A small quantity handler of universal waste may accumulate universal waste for no longer than one year from the date the universal waste is generated, or received from another handler, unless the requirements of Subsection R315-273-15(b) are met.

(b) A small quantity handler of universal waste may accumulate universal waste for longer than one year from the date the universal waste is generated, or received from another handler, if such activity is solely for the purpose of accumulation of such quantities of universal waste as necessary to facilitate proper recovery, treatment, or disposal. However, the handler bears the burden of proving that such activity is solely for the purpose of accumulation of such quantities of universal waste as necessary to facilitate proper recovery, treatment, or disposal.

(c) A small quantity handler of universal waste who accumulates universal waste shall be able to demonstrate the length of time that the universal waste has been accumulated from the date it becomes a waste or is received. The handler may make this demonstration by:

- (1) Placing the universal waste in a container and marking or labeling the container with the earliest date that any universal waste in the container became a waste or was received;

(2) Marking or labeling each individual item of universal waste with the date it became a waste or was received;

(3) Maintaining an inventory system on-site that identifies the date each universal waste became a waste or was received;

(4) Maintaining an inventory system on-site that identifies the earliest date that any universal waste in a group of universal waste items or a group of containers of universal waste became a waste or was received;

(5) Placing the universal waste in a specific accumulation area and identifying the earliest date that any universal waste in the area became a waste or was received; or

(6) Any other method which clearly demonstrates the length of time that the universal waste has been accumulated from the date it becomes a waste or is received.

R315-273-16. Standards for Universal Waste Management, Standards for Small Quantity Handlers of Universal Waste -- Employee Training.

A small quantity handler of universal waste shall inform all employees who handle or have responsibility for managing universal waste. The information shall describe proper handling and emergency procedures appropriate to the type(s) of universal waste handled at the facility.

R315-273-17. Standards for Universal Waste Management, Standards for Small Quantity Handlers of Universal Waste -- Response to Releases.

(a) A small quantity handler of universal waste shall immediately contain all releases of universal wastes and other residues from universal wastes.

(b) A small quantity handler of universal waste shall determine whether any material resulting from the release is hazardous waste, and if so, shall manage the hazardous waste in compliance with all applicable requirements of Rules R315-260 through 266, 268 and 270. The handler is considered the generator of the material resulting from the release, and shall manage it in compliance with Rule R315-262.

R315-273-18. Standards for Universal Waste Management, Standards for Small Quantity Handlers of Universal Waste -- Off-Site Shipments.

(a) A small quantity handler of universal waste is prohibited from sending or taking universal waste to a place other than another universal waste handler, a destination facility, or a foreign destination.

(b) If a small quantity handler of universal waste self-transport universal waste off-site, the handler becomes a universal waste transporter for those self-transportation activities and shall comply with the transporter requirements of Sections R315-273-50 through 56 while transporting the universal waste.

(c) If a universal waste being offered for off-site transportation meets the definition of hazardous materials under 49 CFR parts 171 through 180, a small quantity handler of universal waste shall package, label, mark and placard the shipment, and prepare the proper shipping papers in accordance with the applicable Department of Transportation regulations under 49 CFR parts 172 through 180;

(d) Prior to sending a shipment of universal waste to another universal waste handler, the originating handler shall ensure that the receiving handler agrees to receive the shipment.

(e) If a small quantity handler of universal waste sends a shipment of universal waste to another handler or to a destination facility and the shipment is rejected by the receiving handler or destination facility, the originating handler shall either:

(1) Receive the waste back when notified that the shipment has been rejected, or

(2) Agree with the receiving handler on a destination

facility to which the shipment will be sent.

(f) A small quantity handler of universal waste may reject a shipment containing universal waste, or a portion of a shipment containing universal waste that he has received from another handler. If a handler rejects a shipment or a portion of a shipment, he shall contact the originating handler to notify him of the rejection and to discuss reshipment of the load. The handler shall:

(1) Send the shipment back to the originating handler, or

(2) If agreed to by both the originating and receiving handler, send the shipment to a destination facility.

(g) If a small quantity handler of universal waste receives a shipment containing hazardous waste that is not a universal waste, the handler shall immediately notify the Director of the illegal shipment, and provide the name, address, and phone number of the originating shipper. The Director shall provide instructions for managing the hazardous waste.

(h) If a small quantity handler of universal waste receives a shipment of non-hazardous, non-universal waste, the handler may manage the waste in any way that is in compliance with applicable federal, state or local solid waste regulations.

R315-273-19. Standards for Universal Waste Management, Standards for Small Quantity Handlers of Universal Waste -- Tracking Universal Waste Shipments.

A small quantity handler of universal waste is not required to keep records of shipments of universal waste.

R315-273-20. Standards for Universal Waste Management, Standards for Small Quantity Handlers of Universal Waste -- Exports.

A small quantity handler of universal waste who sends universal waste to a foreign destination other than to those OECD countries specified in Subsection R315-262-58(a)(1), in which case the handler is subject to the requirements of Sections R315-262-80 through 89, shall:

(a) Comply with the requirements applicable to a primary exporter in Section R315-262-53, Subsections R315-262-56(a)(1) through (4), (6), and (b) and Section R315-262-57;

(b) Export such universal waste only upon consent of the receiving country and in conformance with the EPA Acknowledgement of Consent as defined in Sections R315-262-50 through 58; and

(c) Provide a copy of the EPA Acknowledgment of Consent for the shipment to the transporter transporting the shipment for export.

R315-273-30. Standards for Universal Waste Management, Standards for Large Quantity Handlers of Universal Waste -- Applicability.

Sections R315-273-30 through 40 apply to large quantity handlers of universal waste, as defined in Section R315-273-9 except that the registration requirement of Subsection R315-273-33(d)(3) and Subsections R315-273-33(d)(6) and (7) do not apply to generators.

R315-273-31. Standards for Universal Waste Management, Standards for Large Quantity Handlers of Universal Waste -- Prohibitions.

A large quantity handler of universal waste is:

(a) Prohibited from disposing of universal waste; and

(b) Prohibited from diluting or treating universal waste, except by responding to releases as provided in Section R315-273-37; or by managing specific wastes as provided in Section R315-273-33.

R315-273-32. Standards for Universal Waste Management, Standards for Large Quantity Handlers of Universal Waste -- Notification.

(a)(1) Except as provided in Subsections R315-273-32(a)(2) and (3), a large quantity handler of universal waste shall have sent written notification of universal waste management to the Director, and received an EPA Identification Number, before meeting or exceeding the 5,000 kilogram storage limit.

(2) A large quantity handler of universal waste who has already notified the Director of his hazardous waste management activities and has received an EPA Identification Number is not required to renotify under this section except as required in Subsection R315-273-33(d)(3).

(3) A large quantity handler of universal waste who manages recalled universal waste pesticides as described in Subsection R315-273-3(a)(1) and who has sent notification to EPA as required by 40 CFR part 165 is not required to notify for those recalled universal waste pesticides under this section.

(b) This notification shall include:

(1) The universal waste handler's name and mailing address;

(2) The name and business telephone number of the person at the universal waste handler's site who should be contacted regarding universal waste management activities;

(3) The address or physical location of the universal waste management activities;

(4) A list of all the types of universal waste managed by the handler; and

(5) A statement indicating that the handler is accumulating more than 5,000 kilograms of universal waste at one time.

R315-273-33. Standards for Universal Waste Management, Standards for Large Quantity Handlers of Universal Waste -- Waste Management.

(a) Batteries. A large quantity handler of universal waste shall manage universal waste batteries in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

(1) A large quantity handler of universal waste shall contain any universal waste battery that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions in a container. The container shall be closed, structurally sound, compatible with the contents of the battery, and shall lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

(2) A large quantity handler of universal waste may conduct the following activities as long as the casing of each individual battery cell is not breached and remains intact and closed, except that cells may be opened to remove electrolyte but shall be immediately closed after removal:

(i) Sorting batteries by type;

(ii) Mixing battery types in one container;

(iii) Discharging batteries so as to remove the electric charge;

(iv) Regenerating used batteries;

(v) Disassembling batteries or battery packs into individual batteries or cells;

(vi) Removing batteries from consumer products; or

(vii) Removing electrolyte from batteries.

(3) A large quantity handler of universal waste who removes electrolyte from batteries, or who generates other solid waste, e.g., battery pack materials, discarded consumer products, as a result of the activities listed above, shall determine whether the electrolyte and/or other solid waste exhibit a characteristic of hazardous waste identified in Sections R315-261-20 through 24.

(i) If the electrolyte and/or other solid waste exhibit a characteristic of hazardous waste, it shall be managed in compliance with all applicable requirements of Rules R315-260 through 266, 268 and 270. The handler is considered the

generator of the hazardous electrolyte and/or other waste and is subject to Rule R315-262.

(ii) If the electrolyte or other solid waste is not hazardous, the handler may manage the waste in any way that is in compliance with applicable federal, state or local solid waste regulations.

(b) Pesticides. A large quantity handler of universal waste shall manage universal waste pesticides in a way that prevents releases of any universal waste or component of a universal waste to the environment. The universal waste pesticides shall be contained in one or more of the following:

(1) A container that remains closed, structurally sound, compatible with the pesticide, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions; or

(2) A container that does not meet the requirements of Subsection R315-273-33(b)(1), provided that the unacceptable container is overpacked in a container that does meet the requirements of Subsection R315-273-33(b)(1); or

(3) A tank that meets the requirements of 40 CFR 265.190 through 202, except for 40 CFR 265.197(c) and 40 CFR 265.200 and 201, 40 CFR 265 is adopted by reference in R315-265; or

(4) A transport vehicle or vessel that is closed, structurally sound, compatible with the pesticide, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

(c) Mercury-containing equipment. A large quantity handler of universal waste shall manage universal waste mercury-containing equipment in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

(1) A large quantity handler of universal waste shall place in a container any universal waste mercury-containing equipment with non-contained elemental mercury or that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions. The container shall be closed, structurally sound, compatible with the contents of the device, shall lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions, and shall be reasonably designed to prevent the escape of mercury into the environment by volatilization or any other means.

(2) A large quantity handler of universal waste may remove mercury-containing ampules from universal waste mercury-containing equipment provided the handler:

(i) Removes and manages the ampules in a manner designed to prevent breakage of the ampules;

(ii) Removes the ampules only over or in a containment device, e.g., tray or pan sufficient to collect and contain any mercury released from an ampule in case of breakage;

(iii) Ensures that a mercury clean-up system is readily available to immediately transfer any mercury resulting from spills or leaks of broken ampules from that containment device to a container that meets the requirements of Section R315-262-34;

(iv) Immediately transfers any mercury resulting from spills or leaks from broken ampules from the containment device to a container that meets the requirements of Section R315-262-34;

(v) Ensures that the area in which ampules are removed is well ventilated and monitored to ensure compliance with applicable OSHA exposure levels for mercury;

(vi) Ensures that employees removing ampules are thoroughly familiar with proper waste mercury handling and emergency procedures, including transfer of mercury from containment devices to appropriate containers;

(vii) Stores removed ampules in closed, non-leaking containers that are in good condition;

(viii) Packs removed ampules in the container with packing materials adequate to prevent breakage during storage, handling, and transportation;

(3) A large quantity handler of universal waste mercury-containing equipment that does not contain an ampule may remove the open original housing holding the mercury from universal waste mercury-containing equipment provided the handler:

(i) Immediately seals the original housing holding the mercury with an air-tight seal to prevent the release of any mercury to the environment; and

(ii) Follows all requirements for removing ampules and managing removed ampules under Subsection R315-273-33(c)(2); and

(4)(i) A large quantity handler of universal waste who removes mercury-containing ampules from mercury-containing equipment or seals mercury from mercury-containing equipment in its original housing shall determine whether the following exhibit a characteristic of hazardous waste identified in Sections R315-261-20 through 24:

(A) Mercury or clean-up residues resulting from spills or leaks and/or

(B) Other solid waste generated as a result of the removal of mercury-containing ampules or housings, e.g., the remaining mercury-containing device.

(ii) If the mercury, residues, and/or other solid waste exhibits a characteristic of hazardous waste, it shall be managed in compliance with all applicable requirements of Rules R315-260 through 266, 268 and 270. The handler is considered the generator of the mercury, residues, and/or other waste and shall manage it in compliance with Rule R315-262.

(iii) If the mercury, residues, and/or other solid waste is not hazardous, the handler may manage the waste in any way that is in compliance with applicable federal, state or local solid waste regulations.

(d) Lamps. A large quantity handler of universal waste shall manage lamps in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

(1) A large quantity handler of universal waste shall contain any lamp in containers or packages that are structurally sound, adequate to prevent breakage, and compatible with the contents of the lamps. Such containers and packages shall remain closed and shall lack evidence of leakage, spillage or damage that could cause leakage under reasonably foreseeable conditions.

(2) A large quantity handler of universal waste shall immediately clean up and place in a container any lamp that is broken and shall place in a container any lamp that shows evidence of breakage, leakage, or damage that could cause the release of mercury or other hazardous constituents to the environment. Containers shall be closed, structurally sound, compatible with the contents of the lamps and shall lack evidence of leakage, spillage or damage that could cause leakage or releases of mercury or other hazardous constituents to the environment under reasonably foreseeable conditions.

(3) A large quantity handler of universal waste may crush universal waste lamps using a drum-top lamp crusher designed specifically for crushing lamps provided that the Large quantity handler submits a drum-top lamp crusher registration application to and receives approval from the Director. The registration application shall demonstrate that the large quantity handler shall operate the drum-top lamp crusher to ensure the following:

(i) The lamps are crushed in a closed accumulation container designed specifically for crushing lamps;

(ii) The lamps are crushed in a controlled manner that prevents the release of mercury vapor or other contaminants in exceedance of the manufacturer's specifications;

(iii) The drum-top lamp crusher shall consist of a bag filter followed in series by a HEPA filter and an activated carbon filter;

(iv) The drum-top lamp crusher is installed, maintained, and operated in accordance with written procedures developed by the manufacturer of the equipment including specific instructions for the frequency of filter changes;

(v) Filters are either characterized to demonstrate that they are not a hazardous waste or managed as a hazardous waste;

(vi) A spill clean-up kit is available;

(vii) The area in which the drum-top crusher is operated is well ventilated and monitored to ensure compliance with applicable OSHA exposure levels for mercury;

(viii) The employee using the drum-top lamp crusher is trained annually on the written operating, safety, personal protection and maintenance procedures of the system;

(ix) The employee using the drum-top lamp crusher is trained annually in emergency procedures;

(x) An operating record is kept and consists of the following:

(A) the number and size of lamps crushed per calendar day, per calendar month, and per calendar year;

(B) the schedule for the change out of filters;

(C) date and time of filter change out;

(D) date, type, and time of equipment maintenance;

(E) any occurrence of equipment malfunction; and

(F) procedures for preventing equipment malfunctions.

(4) The operating record shall be maintained for at least three years.

(5) When a drum-top crusher is no longer used or is relocated, the area where the crusher was located shall be decontaminated of all mercury and other contaminants caused by the use of the drum-top lamp crusher. A report documenting the decontamination steps as well as supporting analytical data demonstrating successful remediation shall be submitted to the Director for approval within 30 days following completion of decontamination.

(6) The large quantity handler shall provide a closure plan along with a detailed written estimate, in current dollars, of the cost of disposing the drum-top lamp crusher; decontamination of the area surrounding the drum-top lamp crusher, and any analytical costs required to show that decontamination is complete. Drum-top lamp crushers operated by the state or the federal government are exempt from the cost estimate requirement of Subsection R315-273-33(d)(6).

(7) The large quantity handler shall demonstrate financial assurance for the detailed cost estimates determined in Subsection R315-273-33(d)(6) using one of the options in Subsections R315-261-143(a) through (e). Drum-top lamp crushers operated by the state or the federal government are exempt from the financial assurance requirement of Subsection R315-273-33(d)(7).

(8) Crushed universal waste lamps may be managed as universal waste lamps under Rule R315-273 or they may be managed as hazardous waste in accordance with all applicable requirements of Rules R315-260 through 266 and 268.

(e) Antifreeze. A large quantity handler of universal waste shall manage universal waste antifreeze in a way that prevents releases of any universal waste or component of a universal waste to the environment. The universal waste antifreeze shall be contained in one or more of the following:

(1) A container that remains closed, structurally sound, compatible with the antifreeze, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions; or

(2) A container that does not meet the requirements of Subsection R315-273-13(e)(1), provided that the unacceptable container is overpacked in a container that does meet the requirements of Subsection R315-273-13(e)(1); or

(3) A tank that meets the requirements of 40 CFR 265.190 through 202, except for 40 CFR 265.197(c) and 40 CFR 265.200 and 201, 40 CFR 265 is adopted by reference in R315-265; or

(4) A transport vehicle or vessel that is closed, structurally sound, compatible with the antifreeze, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

(f) Aerosol cans. A large quantity handler of universal waste shall manage universal waste aerosol cans in a way that prevents release of any universal waste or component of a universal waste or accelerant to the environment as follows:

(1) A large quantity handler of universal waste shall immediately contain any universal waste aerosol can that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions in a separate individual container. The individual container shall be closed, structurally sound, compatible with the contents of the universal waste aerosol can, and shall lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

(2) A large quantity handler of universal waste may accumulate universal waste aerosol cans in a specially designated accumulation container provided it is clearly marked for such use. The accumulation container shall be closed, structurally sound, compatible with the contents of the universal waste aerosol can, and shall lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions. The universal waste aerosol cans shall be sorted by type and compatibility of contents to ensure that incompatible materials are segregated and managed appropriately in separate accumulation containers.

(3) A large quantity handler of universal waste may puncture universal waste aerosol cans to remove and collect the contents of the aerosol can provided the handler:

(i) Ensures that the universal waste aerosol can is punctured in a manner designed to prevent the release of any universal waste or component of universal waste or accelerant to the environment;

(ii) Ensures that the puncturing operations are performed safely by developing and implementing a written procedure detailing how to safely puncture universal waste aerosol cans. This procedure shall include:

(A) the type of equipment to be used to puncture the universal waste aerosol cans safely;

(B) operation and maintenance of the unit;

(C) segregation of incompatible wastes;

(D) proper waste management practices, i.e., ensuring that flammable wastes are stored away from heat or open flames; and

(E) waste characterization;

(iii) Ensures that a spill clean-up kit is readily available to immediately clean up spills or leaks of the contents of the universal waste aerosol can which may occur during the can-puncturing operation;

(iv) Immediately transfers the contents of the universal waste aerosol can, or puncturing device if applicable, to a container that meets the requirements of Section R315-262-34;

(v) Ensures that the area in which the universal waste aerosol cans are punctured is well ventilated; and

(vi) Ensures that employees are thoroughly familiar with the procedure for sorting and puncturing universal waste aerosol cans, and proper waste handling and emergency procedures, relevant to their responsibilities during normal facility operations and emergencies.

(4)(i) A large quantity handler of universal waste who punctures universal waste aerosol cans to remove the contents of the aerosol can, or who generates other solid waste as a result of the activities listed above, shall determine whether the contents of the universal waste aerosol can, residues and/or

other solid wastes exhibit a characteristic of hazardous waste identified in Sections R315-261-20 through 24, or are listed as a hazardous waste identified in Sections R315-261-30 through 35.

(ii) If the contents of the universal waste aerosol can, residues and/or other solid waste exhibit a characteristic of hazardous waste or are listed hazardous wastes, they shall be managed in compliance with all applicable requirements of Rules R315-260 through 266, 268, 270 and 124. The handler is considered the generator of the contents of the universal waste aerosol can, residues, and/or other waste and is subject to the requirements of Rule R315-262. In addition to the Rule R315-262 labeling requirements, the container used to accumulate, store, or transport the hazardous waste contents removed from the punctured universal waste aerosol can shall be labeled with all applicable EPA Hazardous Waste Codes found in Sections R315-261-20 through 24 and Sections R315-261-30 through 35.

(iii) If the contents of the universal waste aerosol can, residues, and/or other solid waste are not hazardous, the handler may manage the waste in a way that is in compliance with applicable federal, state or local solid waste regulations.

R315-273-34. Standards for Universal Waste Management, Standards for Large Quantity Handlers of Universal Waste -- Labeling/Marking.

A large quantity handler of universal waste shall label or mark the universal waste to identify the type of universal waste as specified below:

(a) Universal waste batteries, i.e., each battery, or a container or tank in which the batteries are contained, shall be labeled or marked clearly with any one of the following phrases: "Universal Waste-Battery(ies)," or "Waste Battery(ies)," or "Used Battery(ies);"

(b) A container, or multiple container package unit, tank, transport vehicle or vessel in which recalled universal waste pesticides as described in Subsection R315-273-3(a)(1) are contained shall be labeled or marked clearly with:

(1) The label that was on or accompanied the product as sold or distributed; and

(2) The words "Universal Waste-Pesticide(s)" or "Waste-Pesticide(s);"

(c) A container, tank, or transport vehicle or vessel in which unused pesticide products as described in Subsection R315-273-3(a)(2) are contained shall be labeled or marked clearly with:

(1)(i) The label that was on the product when purchased, if still legible;

(ii) If using the labels described in Subsection R315-273-34(c)(1)(i) is not feasible, the appropriate label as required under the Department of Transportation regulation 49 CFR part 172;

(iii) If using the labels described in Subsections R315-273-34(c)(1)(i) and (1)(ii) is not feasible, another label prescribed or designated by the pesticide collection program; and

(2) The words "Universal Waste-Pesticide(s)" or "Waste-Pesticide(s)."

(d)(1) Mercury-containing equipment, i.e., each device, or a container in which the equipment is contained, shall be labeled or marked clearly with any of the following phrases: "Universal Waste-Mercury Containing Equipment," "Waste Mercury-Containing Equipment," or "Used Mercury-Containing Equipment."

(2) A universal waste mercury-containing thermostat or container containing only universal waste mercury-containing thermostats may be labeled or marked clearly with any of the following phrases: "Universal Waste-Mercury Thermostat(s)," "Waste Mercury Thermostat(s)," or "Used Mercury

Thermostat(s)."

(e) Each lamp or a container or package in which such lamps are contained shall be labeled or marked clearly with any one of the following phrases: "Universal Waste-Lamp(s)," or "Waste Lamp(s)," or "Used Lamp(s)".

(f) A container, tank, or transport vehicle or vessel in which antifreeze is contained shall be labeled or marked clearly with the words "Universal Waste- antifreeze" or "Waste-antifreeze."

(g) Universal waste aerosol cans, i.e., each can, or a container in which the universal waste aerosol cans are contained or accumulated, shall be labeled or marked clearly with any one of the following phrases: "Universal Waste-Aerosol Can(s)," or "Waste Aerosol Can(s)".

R315-273-35. Standards for Universal Waste Management, Standards for Large Quantity Handlers of Universal Waste -- Accumulation Time Limits.

(a) A large quantity handler of universal waste may accumulate universal waste for no longer than one year from the date the universal waste is generated, or received from another handler, unless the requirements of Subsection R315-273-35(b) are met.

(b) A large quantity handler of universal waste may accumulate universal waste for longer than one year from the date the universal waste is generated, or received from another handler, if such activity is solely for the purpose of accumulation of such quantities of universal waste as necessary to facilitate proper recovery, treatment, or disposal. However, the handler bears the burden of proving that such activity was solely for the purpose of accumulation of such quantities of universal waste as necessary to facilitate proper recovery, treatment, or disposal.

(c) A large quantity handler of universal waste shall be able to demonstrate the length of time that the universal waste has been accumulated from the date it becomes a waste or is received. The handler may make this demonstration by:

(1) Placing the universal waste in a container and marking or labeling the container with the earliest date that any universal waste in the container became a waste or was received;

(2) Marking or labeling the individual item of universal waste, e.g., each battery or thermostat, with the date it became a waste or was received;

(3) Maintaining an inventory system on-site that identifies the date the universal waste being accumulated became a waste or was received;

(4) Maintaining an inventory system on-site that identifies the earliest date that any universal waste in a group of universal waste items or a group of containers of universal waste became a waste or was received;

(5) Placing the universal waste in a specific accumulation area and identifying the earliest date that any universal waste in the area became a waste or was received; or

(6) Any other method which clearly demonstrates the length of time that the universal waste has been accumulated from the date it becomes a waste or is received.

R315-273-36. Standards for Universal Waste Management, Standards for Large Quantity Handlers of Universal Waste -- Employee Training.

A large quantity handler of universal waste shall ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures, relative to their responsibilities during normal facility operations and emergencies.

R315-273-37. Standards for Universal Waste Management, Standards for Large Quantity Handlers of Universal Waste -- Response To Releases.

(a) A large quantity handler of universal waste shall immediately contain all releases of universal wastes and other residues from universal wastes.

(b) A large quantity handler of universal waste shall determine whether any material resulting from the release is hazardous waste, and if so, shall manage the hazardous waste in compliance with all applicable requirements of Rules R315-260 through 266, 268 and 270. The handler is considered the generator of the material resulting from the release, and is subject to Rule R315-262.

R315-273-38. Standards for Universal Waste Management, Standards for Large Quantity Handlers of Universal Waste -- Off-Site Shipments.

(a) A large quantity handler of universal waste is prohibited from sending or taking universal waste to a place other than another universal waste handler, a destination facility, or a foreign destination.

(b) If a large quantity handler of universal waste self-transport universal waste off-site, the handler becomes a universal waste transporter for those self-transportation activities and shall comply with the transporter requirements of Sections R315-273-50 through 56 while transporting the universal waste.

(c) If a universal waste being offered for off-site transportation meets the definition of hazardous materials under 49 CFR 171 through 180, a large quantity handler of universal waste shall package, label, mark and placard the shipment, and prepare the proper shipping papers in accordance with the applicable Department of Transportation regulations under 49 CFR parts 172 through 180;

(d) Prior to sending a shipment of universal waste to another universal waste handler, the originating handler shall ensure that the receiving handler agrees to receive the shipment.

(e) If a large quantity handler of universal waste sends a shipment of universal waste to another handler or to a destination facility and the shipment is rejected by the receiving handler or destination facility, the originating handler shall either:

(1) Receive the waste back when notified that the shipment has been rejected, or

(2) Agree with the receiving handler on a destination facility to which the shipment will be sent.

(f) A large quantity handler of universal waste may reject a shipment containing universal waste, or a portion of a shipment containing universal waste that he has received from another handler. If a handler rejects a shipment or a portion of a shipment, he shall contact the originating handler to notify him of the rejection and to discuss reshipment of the load. The handler shall:

(1) Send the shipment back to the originating handler, or

(2) If agreed to by both the originating and receiving handler, send the shipment to a destination facility.

(g) If a large quantity handler of universal waste receives a shipment containing hazardous waste that is not a universal waste, the handler shall immediately notify the Director of the illegal shipment, and provide the name, address, and phone number of the originating shipper. The Director shall provide instructions for managing the hazardous waste.

(h) If a large quantity handler of universal waste receives a shipment of non-hazardous, non-universal waste, the handler may manage the waste in any way that is in compliance with applicable federal, state or local solid waste regulations.

R315-273-39. Standards for Universal Waste Management, Standards For Large Quantity Handlers Of Universal Waste -- Tracking Universal Waste Shipments.

(a) Receipt of shipments. A large quantity handler of universal waste shall keep a record of each shipment of

universal waste received at the facility. The record may take the form of a log, invoice, manifest, bill of lading, or other shipping document. The record for each shipment of universal waste received shall include the following information:

(1) The name and address of the originating universal waste handler or foreign shipper from whom the universal waste was sent;

(2) The quantity of each type of universal waste received;

(3) The date of receipt of the shipment of universal waste.

(b) Shipments off-site. A large quantity handler of universal waste shall keep a record of each shipment of universal waste sent from the handler to other facilities. The record may take the form of a log, invoice, manifest, bill of lading or other shipping document. The record for each shipment of universal waste sent shall include the following information:

(1) The name and address of the universal waste handler, destination facility, or foreign destination to whom the universal waste was sent;

(2) The quantity of each type of universal waste sent;

(3) The date the shipment of universal waste left the facility.

(c) Record retention.

(1) A large quantity handler of universal waste shall retain the records described in Subsection R315-273-39(a) for at least three years from the date of receipt of a shipment of universal waste.

(2) A large quantity handler of universal waste shall retain the records described in Subsection R315-273-39(b) for at least three years from the date a shipment of universal waste left the facility.

R315-273-40. Standards for Universal Waste Management, Standards for Large Quantity Handlers of Universal Waste -- Exports.

A large quantity handler of universal waste who sends universal waste to a foreign destination other than to those OECD countries specified in Subsection R315-262-58(a)(1), in which case the handler is subject to the requirements of Sections R315-262-80 through 89, shall:

(a) Comply with the requirements applicable to a primary exporter in Section R315-262-53, Subsections R315-262-56(a)(1) through (4), (6), and (b) and Section R315-262-57;

(b) Export such universal waste only upon consent of the receiving country and in conformance with the EPA Acknowledgement of Consent as defined in Sections R315-262-50 through 58; and

(c) Provide a copy of the EPA Acknowledgement of Consent for the shipment to the transporter transporting the shipment for export.

R315-273-50. Standards for Universal Waste Management, Standards for Universal Waste Transporters -- Applicability.

Sections R315-273-50 through 56 apply to universal waste transporters, as defined in Section R315-273-9.

R315-273-51. Standards for Universal Waste Management, Standards for Universal Waste Transporters -- Prohibitions.

A universal waste transporter is:

(a) Prohibited from disposing of universal waste; and

(b) Prohibited from diluting or treating universal waste, except by responding to releases as provided in Section R315-273-54.

R315-273-52. Standards for Universal Waste Management, Standards for Universal Waste Transporters -- Waste Management.

(a) A universal waste transporter shall comply with all applicable U.S. Department of Transportation regulations in 49

CFR part 171 through 180 for transport of any universal waste that meets the definition of hazardous material in 49 CFR 171.8. For purposes of the Department of Transportation regulations, a material is considered a hazardous waste if it is subject to the Hazardous Waste Manifest Requirements of Rule R315-262. Because universal waste does not require a hazardous waste manifest, it is not considered hazardous waste under the Department of Transportation regulations.

(b) Some universal waste materials are regulated by the Department of Transportation as hazardous materials because they meet the criteria for one or more hazard classes specified in 49 CFR 173.2. As universal waste shipments do not require a manifest under Rule R315-262, they may not be described by the DOT proper shipping name "hazardous waste, (l) or (s), n.o.s.", nor may the hazardous material's proper shipping name be modified by adding the word "waste".

R315-273-53. Standards for Universal Waste Management, Standards for Universal Waste Transporters -- Storage Time Limits.

(a) A universal waste transporter may only store the universal waste at a universal waste transfer facility for ten days or less.

(b) If a universal waste transporter stores universal waste for more than ten days, the transporter becomes a universal waste handler and shall comply with the applicable requirements of Sections R315-273-10 through 20 and 30 through 40 while storing the universal waste.

R315-273-54. Standards for Universal Waste Management, Standards for Universal Waste Transporters -- Response to Releases.

(a) A universal waste transporter shall immediately contain all releases of universal wastes and other residues from universal wastes.

(b) A universal waste transporter shall determine whether any material resulting from the release is hazardous waste, and if so, it is subject to all applicable requirements of Rules R315-260 through 266, 268 and 270. If the waste is determined to be a hazardous waste, the transporter is subject to Rule R315-262.

R315-273-55. Standards for Universal Waste Management, Standards for Universal Waste Transporters -- Off-site Shipments.

(a) A universal waste transporter is prohibited from transporting the universal waste to a place other than a universal waste handler, a destination facility, or a foreign destination.

(b) If the universal waste being shipped off-site meets the Department of Transportation's definition of hazardous materials under 49 CFR 171.8, the shipment shall be properly described on a shipping paper in accordance with the applicable Department of Transportation regulations under 49 CFR part 172.

R315-273-56. Standards for Universal Waste Management, Standards for Universal Waste Transporters -- Exports.

A universal waste transporter transporting a shipment of universal waste to a foreign destination other than to those OECD countries specified in Subsection R315-262-58(a)(1), in which case the transporter is subject to the requirements of Sections R315-262-80 through 89, may not accept a shipment if the transporter knows the shipment does not conform to the EPA Acknowledgement of Consent. In addition the transporter shall ensure that:

(a) A copy of the EPA Acknowledgement of Consent accompanies the shipment; and

(b) The shipment is delivered to the facility designated by the person initiating the shipment.

R315-273-60. Standards for Universal Waste Management, Standards for Destination Facilities -- Applicability.

(a) The owner or operator of a destination facility, as defined in Section R315-273-9, is subject to all applicable requirements of Rules R315-264, 265, 266, 268, 270, and 124, and the notification requirement under section 3010 of RCRA.

(b) The owner or operator of a destination facility that recycles a particular universal waste without storing that universal waste before it is recycled shall comply with Subsection R315-261-6(c)(2).

R315-273-61. Standards for Universal Waste Management, Standards for Destination Facilities -- Off-site Shipments.

(a) The owner or operator of a destination facility is prohibited from sending or taking universal waste to a place other than a universal waste handler, another destination facility or foreign destination.

(b) The owner or operator of a destination facility may reject a shipment containing universal waste, or a portion of a shipment containing universal waste. If the owner or operator of the destination facility rejects a shipment or a portion of a shipment, he shall contact the shipper to notify him of the rejection and to discuss reshipment of the load. The owner or operator of the destination facility shall:

(1) Send the shipment back to the original shipper, or

(2) If agreed to by both the shipper and the owner or operator of the destination facility, send the shipment to another destination facility.

(c) If the owner or operator of a destination facility receives a shipment containing hazardous waste that is not a universal waste, the owner or operator of the destination facility shall immediately notify the Director of the illegal shipment, and provide the name, address, and phone number of the shipper. The Director shall provide instructions for managing the hazardous waste.

(d) If the owner or operator of a destination facility receives a shipment of non-hazardous, non-universal waste, the owner or operator may manage the waste in any way that is in compliance with applicable federal or state solid waste regulations.

R315-273-62. Standards for Universal Waste Management, Standards for Destination Facilities -- Tracking Universal Waste Shipments.

(a) The owner or operator of a destination facility shall keep a record of each shipment of universal waste received at the facility. The record may take the form of a log, invoice, manifest, bill of lading, or other shipping document. The record for each shipment of universal waste received shall include the following information:

(1) The name and address of the universal waste handler, destination facility, or foreign shipper from whom the universal waste was sent;

(2) The quantity of each type of universal waste received;

(3) The date of receipt of the shipment of universal waste.

(b) The owner or operator of a destination facility shall retain the records described in Subsection R315-273-62(a) for at least three years from the date of receipt of a shipment of universal waste.

R315-273-70. Standards for Universal Waste Management -- Imports.

Persons managing universal waste that is imported from a foreign country into the United States are subject to the applicable requirements of Rule R315-273, immediately after the waste enters the United States, as indicated in Subsection R315-273-70(a) through (c):

(a) A universal waste transporter is subject to the universal waste transporter requirements of Sections R315-273-50

through 56.

(b) A universal waste handler is subject to the small or large quantity handler of universal waste requirements of Sections R315-273-10 through 20 or 30 through 40, as applicable.

(c) An owner or operator of a destination facility is subject to the destination facility requirements of Sections R315-273-60 through 62.

(d) Persons managing universal waste that is imported from an OECD country as specified in Subsection R315-262-58(a)(1) are subject to Subsections R315-273-70(a) through (c), in addition to the requirements of Sections R315-262-80 through 89.

R315-273-80. Standards for Universal Waste Management, Petitions to Include Other Wastes Under Rule R315-273 -- General.

(a) Any person seeking to add a hazardous waste or a category of hazardous waste to Rule R315-273 may petition for a regulatory amendment under Sections R315-273-80 and 81 and Sections R315-260-20 and 23.

(b) To be successful, the petitioner shall demonstrate to the satisfaction of the Board that regulation under the universal waste regulations of Rule R315-273 is: appropriate for the waste or category of waste; will improve management practices for the waste or category of waste; and will improve implementation of the hazardous waste program. The petition shall include the information required by Subsection R315-260-20(b). The petition should also address as many of the factors listed in Section R315-273-81 as are appropriate for the waste or waste category addressed in the petition.

(c) The Board shall evaluate petitions using the factors listed in Section R315-273-81. The Board shall grant or deny a petition using the factors listed in Section R315-273-81. The decision shall be based on the weight of evidence showing that regulation under Rule R315-273 is appropriate for the waste or category of waste, shall improve management practices for the waste or category of waste, and shall improve implementation of the hazardous waste program.

(d) The Board may request additional information needed to evaluate the merits of the petition.

R315-273-81. Standards for Universal Waste Management -- Factors for Petitions to Include Other Wastes Under Rule R315-273.

(a) The waste or category of waste, as generated by a wide variety of generators, is listed in Sections R315-261-30 through 3, or, if not listed, a proportion of the waste stream exhibits one or more characteristics of hazardous waste identified in Sections R315-261-20 through 24. When a characteristic waste is added to the universal waste regulations of this Rule R315-273 by using a generic name to identify the waste category, e.g., batteries, the definition of universal waste in Section R315-260-10 and Section R315-273-9 shall be amended to include only the hazardous waste portion of the waste category, e.g., hazardous waste batteries. Thus, only the portion of the waste stream that does exhibit one or more characteristics, i.e., is hazardous waste, is subject to the universal waste regulations of Rule R315-273;

(b) The waste or category of waste is not exclusive to a specific industry or group of industries, is commonly generated by a wide variety of types of establishments, including, for example, households, retail and commercial businesses, office complexes, very small quantity generators, small businesses, government organizations, as well as large industrial facilities;

(c) The waste or category of waste is generated by a large number of generators, e.g., more than 1,000 nationally, and is frequently generated in relatively small quantities by each generator;

(d) Systems to be used for collecting the waste or category

of waste, including packaging, marking, and labeling practices, would ensure close stewardship of the waste;

(e) The risk posed by the waste or category of waste during accumulation and transport is relatively low compared to other hazardous wastes, and specific management standards proposed or referenced by the petitioner, e.g., waste management requirements appropriate to be added to Sections R315-273-13, 33, and 52; and/or applicable Department of Transportation requirements, would be protective of human health and the environment during accumulation and transport;

(f) Regulation of the waste or category of waste under Rule R315-273 will increase the likelihood that the waste will be diverted from non-hazardous waste management systems; e.g., the municipal waste stream, non-hazardous industrial or commercial waste stream, municipal sewer or stormwater systems; to recycling; treatment; or disposal in compliance with Title 19 Chapter 6.

(g) Regulation of the waste or category of waste under Rule R315-273 will improve implementation of and compliance with the hazardous waste regulatory program; and/or

(h) Such other factors as may be appropriate.

KEY: hazardous waste, universal waste
August 31, 2017

19-6-105
19-6-106

R315. Environmental Quality, Waste Management and Radiation Control, Waste Management.**R315-301. Solid Waste Authority, Definitions, and General Requirements.****R315-301-1. Authority and Purpose.**

The Solid Waste Permitting and Management Rules are promulgated under the authority of the Solid and Hazardous Waste Act, Chapter 6 of Title 19, to protect human health, to prevent land, air and water pollution, and to conserve the state's natural, economic and energy resources by setting minimum performance standards for the proper management of solid wastes originating from residences, commercial, agricultural, and other sources.

R315-301-2. Definitions.

Terms used in Rules R315-301 through R315-320 are defined in Sections 19-1-103, 19-6-102, and 19-6-803. In addition, for the purpose of Rules R315-301 through 320, the following definitions apply.

(1) "Active area" means that portion of a facility where solid waste recycling, reuse, treatment, storage, or disposal operations are being conducted.

(2) "Airport" means a public-use airport open to the public without prior permission and without restrictions within the physical capacities of available facilities.

(3) "Aquifer" means a geological formation, group of formations, or portion of a formation that contains sufficiently saturated permeable material to yield useable quantities of ground water to wells or springs.

(4) "Areas susceptible to mass movement" means those areas of influence, characterized as having an active or substantial possibility of mass movement, where the movement of earth material at, beneath, or adjacent to the landfill unit, because of natural or human-induced events, results in the downslope transport of soil and rock material by means of gravitational influence. Areas of mass movement include landslides, avalanches, debris slides and flows, soil fluction, block sliding, and rock falls.

(5) "Asbestos waste" means friable asbestos, which is any material containing more than 1% asbestos as determined using the method specified in Appendix A, 40 CFR Part 763.1, 2001 ed., which is adopted and incorporated by reference, that when dry, can be crumbled, pulverized, or reduced to powder by hand pressure.

(6) "Background concentration" means the concentration of a contaminant in ground water upgradient or a lateral hydraulically equivalent point from a facility, practice, or activity, and which has not been affected by that facility, practice, or activity.

(7) "Class I Landfill" means a non-commercial landfill or a landfill that meets the definition found in Subsection 19-6-102(3)(a)(iii) and is permitted by the Director

(a) to receive for disposal:

(i) municipal solid waste;

(ii) any other nonhazardous solid waste, not otherwise limited by rule or solid waste permit; or

(iii) in conjunction with municipal solid waste or other nonhazardous solid waste, waste from a very small quantity generator of hazardous waste, as defined by Section R315-260-10; and

(b) does not meet the standards of Subsection R315-303-3(3)(e)(v).

(8) "Class II Landfill" means a non-commercial landfill or a landfill that is permitted by the Director

(a) to receive for disposal:

(i) municipal solid waste;

(ii) any other nonhazardous solid waste, not otherwise limited by rule or solid waste permit; or

(iii) in conjunction with municipal solid waste or other

nonhazardous solid waste, waste from a very small quantity generator of hazardous waste, as defined by Section R315-260-10.

(b) meets the standards of Subsection R315-303-3(3)(e)(v).

(9) "Class III Landfill" means a non-commercial landfill that is permitted by the Director to receive for disposal only industrial solid waste.

(10) "Class IV Landfill" means a non-commercial landfill that is permitted by the Director to receive for disposal only:

(a) construction/demolition waste;

(b) yard waste;

(c) inert waste;

(d) dead animals, as approved by the Director and upon meeting the requirements of Section R315-315-6;

(e) waste tires and materials derived from waste tires, upon meeting the requirements of Section 19-6-804 and Section R315-320-3; and

(f) petroleum-contaminated soils, upon meeting the requirements of Subsection R315-315-8(3).

(11) "Class V Landfill" means a commercial nonhazardous solid waste disposal facility, as defined by Subsection 19-6-102(3), that is permitted by the Director to receive for disposal:

(a) municipal solid waste;

(b) any other nonhazardous solid waste, not otherwise limited by rule or solid waste permit; and

(c) in conjunction with municipal solid waste or other nonhazardous solid waste, waste from a very small quantity generator of hazardous waste, as defined by Section R315-260-10.

(12) "Class VI Landfill" means a commercial nonhazardous solid waste landfill that is permitted by the Director to receive for disposal only:

(a) construction/demolition waste, excluding waste from a very small quantity generator of hazardous waste, as defined by Section R315-260-10;

(b) yard waste;

(c) inert waste;

(d) dead animals, as approved by the Director and upon meeting the requirements of Section R315-315-6;

(e) waste tires and materials derived from waste tires, upon meeting the requirements of Section 19-6-804 and Subsection R315-320-3(1) or (2); and

(f) petroleum-contaminated soils, upon meeting the requirements of Subsection R315-315-8(3).

(g) A Class VI Landfill may not receive for disposal:

(i) hazardous waste;

(ii) construction/demolition waste containing PCBs, except as allowed by Section R315-315-7;

(iii) garbage;

(iv) municipal solid waste; or

(v) industrial solid waste.

(h) The wastes received at a Class VI Landfill may be further limited by a solid waste permit.

(i) A Class VI Landfill may not change to a Class V Landfill except by meeting all requirements for a Class V Landfill including obtaining a new Class V Landfill permit and completing the requirements specified in Subsection R315-310-3(2).

(13) "Closed facility" means any facility that no longer receives solid waste and has completed an approved closure plan, and any landfill on which an approved final cover has been installed.

(14) "Commercial solid waste" means all types of solid waste generated by stores, offices, restaurants, warehouses, and other nonmanufacturing activities, excluding household waste and industrial wastes.

(15) "Composite liner" means a liner system consisting of two components: the upper component consisting of a synthetic

flexible membrane liner, and the lower component consisting of a layer of compacted soil. The composite liner must have the synthetic flexible membrane liner installed in direct and uniform contact with the compacted soil component and be constructed of specified materials and compaction to meet specified permeabilities.

(16) "Composting" means a method of solid waste management whereby the organic component of the waste stream is biologically decomposed under controlled aerobic conditions, at a temperature of 140 degrees Fahrenheit (60 degrees Celsius), or higher, for at least some part of each day of a consecutive seven day period, to a state in which the end product or compost can be handled, stored, or applied to the land without adversely affecting human health or the environment.

(17) "Construction/demolition waste" means solid waste from building materials, packaging, and rubble resulting from construction, remodeling, repair, abatement, rehabilitation, renovation, and demolition operations on pavements, houses, commercial buildings, and other structures, including waste from a very small quantity generator of hazardous waste, as defined by Section R315-260-10, that may be generated by these operations.

(a) Such waste may include:

- (i) concrete, bricks, and other masonry materials;
- (ii) soil and rock;
- (iii) waste asphalt;
- (iv) rebar contained in concrete; and
- (v) untreated wood, and tree stumps.

(b) Construction/demolition waste does not include:

- (i) friable asbestos;
- (ii) treated wood; or
- (iii) contaminated soils or tanks resulting from remediation or clean-up at any release or spill.

(18) "Contaminant" means any physical, chemical, biological, or radiological substance or matter in water or soil that is a result of human activity.

(19) "Displaced" or "displacement" means the relative movement of any two sides of a fault measured in any direction.

(20) "Drop box facility" means a facility used for the collection of a large detachable container or drop box for the collection of solid waste for transport to a solid waste disposal facility. The facility includes the area adjacent to the containers for necessary entrance, exit, unloading, and turn-around areas. Drop box facilities normally serve the general public with uncompacted loads and receive waste from off site. Drop box facilities do not include residential or commercial waste containers on the site of waste generation.

(21) "Energy recovery" means the recovery of energy in a useable form from incineration, burning, or any other means of using the heat of combustion of solid waste that involves high temperature (above 1200 degrees Fahrenheit) processing.

(22) "Existing facility" means any facility that has:

(a) a current valid solid waste permit or other valid approval issued under Rules R315-301 through 320 by the Director; and

(b) received final approval to accept waste as required by Subsection R315-301-5(1).

(23) "Expansion of a solid waste disposal facility" means any lateral expansion beyond the property boundaries outlined in the permit application for the current permit under which the facility is operating.

(24) "Facility" means all contiguous land, structures, other appurtenances, and improvements on the land used for treating, storing, or disposing of solid waste. A facility may consist of several treatment, storage, or disposal operational units, e.g., one or more incinerators, landfills, container storage areas, or combinations of these.

(25) "Floodplain" means the land that has been or may be

hereafter covered by flood water which has a 1% chance of occurring any given year. The flood is also referred to as the base flood or 100-year flood.

(26) "Free liquids" means liquids which readily separate from the solid portion of a waste under ambient temperature and pressure or as determined by EPA test method 9095 (Paint Filter Liquids Test) as provided in EPA Report SW-846 "Test Methods for Evaluating Solid Waste" as revised December (1996) which is adopted and incorporated by reference.

(27) "Garbage" means discarded animal and vegetable wastes resulting from the handling, preparation, cooking and consumption of food, and of such a character and proportion as to be capable of attracting or providing food for vectors. Garbage does not include sewage and sewage sludge.

(28) "Ground water" means subsurface water that is in the zone of saturation including perched ground water.

(29) "Ground water quality standard" means a standard for maximum allowable contamination in ground water as set by Section R315-308-4.

(30) "Hazardous waste" means hazardous waste as defined by Subsection 19-6-102(9) and Section R315-261-3.

(31) "Holocene fault" means a fracture or zone of fractures along which rocks on one side of the fracture have been displaced with respect to those on the other side, which has occurred in the most recent epoch of the Quaternary period extending from the end of the Pleistocene, approximately 11,000 years ago, to the present.

(32) "Household size" means a container for a material or product that is normally and reasonably associated with households or household activities. The containers are of a size and design to hold materials or products generally for immediate use and not for storage, five gallons or less in size.

(33) "Household waste" means any solid waste, including garbage, trash, and sanitary waste in septic tanks, derived from households including single and multiple residences, hotels, motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas.

(34) "Incineration" means a controlled thermal process by which solid wastes are physically or chemically altered to gas, liquid, or solid residues that are also regulated solid wastes. Incineration includes the thermal destruction of solid waste for energy recovery. Incineration does not include smelting operations where metals are reprocessed or the refining, processing, or burning of used oil for energy recovery as described in Rule R315-15.

(35) "Industrial solid waste" means any solid waste generated at a manufacturing or other industrial facility that is not a hazardous waste or that is a hazardous waste from a very small quantity generator of hazardous waste, as defined by Section R315-260-10, generated by an industrial facility. Industrial solid waste includes waste from the following industries or resulting from the following manufacturing processes and associated activities: electric power generation; fertilizer or agricultural chemical industries; food and related products or by-products industries; inorganic chemical industries; iron and steel manufacturing; leather and leather product industries; nonferrous metals manufacturing or foundry industries; organic chemical industries; plastics and resins manufacturing; pulp and paper industry; rubber and miscellaneous plastic product industries; stone, glass, clay, and concrete product industries; textile manufacturing; transportation equipment manufacturing; and water treatment industries. This term does not include mining waste; oil and gas waste; or other waste excluded by Subsection 19-6-102(18)(b).

(36) "Industrial solid waste facility" means a facility that receives only industrial solid waste from on-site or off-site sources for disposal.

(37) "Inert waste" means noncombustible, nonhazardous solid wastes that retain their physical and chemical structure

under expected conditions of disposal, including wastes that exhibit resistance to biological or chemical change.

(38) "Landfill" means a disposal facility where solid waste is or has been placed in or on the land and that is not a land treatment facility or surface impoundment.

(39) "Land treatment, landfarming, or landspreading facility" means a facility or unit within a facility where solid waste is applied onto or incorporated into the soil surface for the purpose of biodegradation.

(40) "Lateral expansion of the solid waste disposal area" means:

(a) any horizontal expansion of the waste boundaries of an existing landfill cell, module, or unit;

(b) the construction of a new cell, module, or unit within the boundaries outlined in the permit application of the current permit under which the facility is operating; or

(c) any horizontal expansion not consistent with past normal operating practices.

(41) "Lateral hydraulically equivalent point" means a point located hydraulically equal to a facility and in the same ground water with similar geochemistry such that the ground water, at that point, has not been affected by the facility.

(42) "Leachate" means a liquid that has passed through or emerged from solid waste and that may contain soluble, suspended, miscible, or immiscible materials removed from such waste.

(43) "Lithified earth material" means all rock, including all naturally occurring and naturally formed aggregates or masses of minerals or small particles of older rock that formed by crystallization of magma or by induration of loose sediments. This term does not include human-made materials, such as fill, concrete and asphalt, or unconsolidated earth materials, soil, or regolith lying at or near the earth surface.

(44) "Lower explosive limit" means the lowest percentage by volume of a mixture of explosive gases that will propagate a flame in air at 25 degrees Celsius (77 degrees Fahrenheit) and atmospheric pressure.

(45) "Maximum horizontal acceleration in lithified earth material" means the maximum expected horizontal acceleration depicted on a seismic hazard map, with a 90% or greater probability that the acceleration will not be exceeded in 250 years, or the maximum expected horizontal acceleration based on site specific seismic risk assessment.

(46) "Municipal solid waste landfill" means a permitted nonhazardous solid waste landfill that may receive municipal solid waste for disposal.

(47) "Municipal solid waste" means household waste, nonhazardous commercial solid waste, and non-hazardous sludge.

(48) "New facility" means any facility that:

(a) has applied for a permit or other valid approval issued under Rules R315-301 through 320 by the Director;

(b) did not have a permit or other valid approval issued under Rules R315-301 through 320 at the time of the application; and

(c) has not received final approval to accept waste as required by Subsection R315-301-5(1).

(49) "Off site" means any site which is not on site.

(50) "On site" means the same or geographically contiguous property that may be divided by public or private right-of-way, provided that the entrance and exit between the properties is at a cross-roads intersection, and access is by crossing, as opposed to going along the right-of-way. Property separated by a private right-of-way, which the site owner or operator controls, and to which the public does not have access, is also considered on-site property.

(51) "Operator" means the person, as defined by Subsection 19-1-103(4), responsible for the overall operation of a facility.

(52) "Owner" means the person, as defined by Subsection 19-1-103(4), who has an ownership interest in a facility or part of a facility.

(53) "PCB" or "PCBs" means any chemical substance that is limited to the biphenyl molecule that has been chlorinated to varying degrees or any combination of materials which contain such substances.

(54) "Permeability" means the ease with which a porous material allows water and the solutes contained therein to flow through it. This is usually expressed in units of centimeters per second (cm/sec) and termed hydraulic conductivity. Soils and synthetic liners with a permeability for water of 1×10^{-7} cm/sec or less may be considered impermeable.

(55) "Permit" means the plan approval as required by Subsection 19-6-108(3)(a), or equivalent control document issued by the Director to implement the requirements of the Utah Solid and Hazardous Waste Act.

(56) "Pile" means any noncontainerized accumulation of solid waste that is used for treatment or storage.

(57) "Poor foundation conditions" means those areas where features exist which indicate that a natural or human-induced event may result in inadequate foundation support for the structural components of a landfill unit.

(58) "Putrescible waste" means solid waste which contains organic matter capable of being decomposed by microorganisms and of such a character and proportion as to be capable of attracting or providing food for vectors including birds and mammals.

(59) "Qualified ground water scientist" means a scientist or engineer who has received a baccalaureate or post-graduate degree in the natural sciences or engineering and has sufficient training and experience in ground water hydrology and related fields as may be demonstrated by state registration, professional certification, or completion of accredited university programs that enable that individual to make sound professional judgements regarding ground water monitoring, contaminant fate and transport, and corrective action.

(60) "Recycling" means extracting valuable materials from the waste stream and transforming or remanufacturing them into usable materials that have a demonstrated or potential market.

(a) Recycling does not include processes that generate such volumes of material that no market exists for the material.

(b) Any part of the waste stream entering a recycling facility and subsequently returning to a waste stream or being otherwise disposed has the same regulatory designation as the original waste.

(c) Recycling includes the substitution of nonhazardous solid waste fuels for conventional fuels (such as coal, natural gas, and petroleum products) for the purpose of generating the heat necessary to manufacture a product.

(61) "Recyclable materials" means those solid wastes that can be recovered from or otherwise diverted from the waste stream for the purpose of recycling, such as metals, paper, glass, and plastics.

(62) "Run-off" means any rainwater, leachate, or other liquid that has contacted solid waste and drains over land from any part of a facility.

(63) "Run-on" means any rainwater, leachate, or other liquid that drains over land onto the active area of a facility.

(64) "Scavenging" means the unauthorized removal of solid waste from a facility.

(65) "Seismic impact zone" means an area with a 10% or greater probability that the maximum horizontal acceleration in lithified earth material, expressed as a percentage of the earth's gravitational pull, will exceed 0.10g in 250 years.

(66) "Septage" means a semisolid consisting of settled sewage solids combined with varying amounts of water and dissolved materials generated from septic tank systems.

(67) "Sharps" means any discarded or contaminated article

or instrument from a health facility that may cause puncture or cuts. Such waste may include needles, syringes, blades, needles with attached tubing, pipettes, pasteurs, broken glass, and blood vials.

(68) "Sludge" means any solid, semisolid, or liquid waste, including grit and screenings generated from a:

- (a) municipal, commercial, or industrial waste water treatment plant;
- (b) water supply treatment plant;
- (c) car wash facility;
- (d) air pollution control facility; or
- (e) any other such waste having similar characteristics.

(69) "Solid waste disposal facility" means a landfill, incinerator, or land treatment area.

(70) "Solid waste incinerator facility" means a facility at which solid waste is received from on-site or off-site sources and is subjected to the incineration process. An incinerator facility that incinerates solid waste for any reason, including energy recovery, volume reduction, or to render it non-infectious, is a solid waste incinerator facility and is subject to Rules R315-301 through 320.

(71) "Special waste" means discarded solid waste that may require special handling or other solid waste that may pose a threat to public safety, human health, or the environment.

- (a) Special waste may include:
 - (i) ash;
 - (ii) automobile bodies;
 - (iii) furniture and appliances;
 - (iv) infectious waste;
 - (v) waste tires;
 - (vi) dead animals;
 - (vii) asbestos;
 - (viii) waste exempt from the hazardous waste regulations under Section R315-261-4;
 - (ix) very small quantity generator hazardous waste as defined by Section R315-260-10;
 - (x) waste containing PCBs;
 - (xi) petroleum contaminated soils;
 - (xii) waste asphalt; and
 - (xiii) sludge.

(b) Special waste must be handled and disposed according to the requirements of Rule R315-315.

(72) "State" means the State of Utah.

(73) "Structural components" means liners, leachate collection systems, final covers, run-on or run-off systems, and any other component used in the construction and operation of a landfill that is necessary for the protection of human health and the environment.

(74) "Surface impoundment or impoundment" means a facility or part of a facility which is a natural topographic depression, human-made excavation, or diked area formed primarily of earthen materials, although it may be lined with synthetic materials, which is designed to hold an accumulation of liquid waste or waste containing free liquids, and which is not an injection well. Examples of surface impoundments are holding, storage, settling, and aeration pits, ponds, and lagoons.

(75) "Transfer station" means a permanent, fixed, supplemental collection and transportation facility that is staffed by a minimum of one employee of the owner or operator during hours of operation and is used by persons and route collection vehicles to deposit collected solid waste from off-site into a transfer vehicle for transport to a solid waste handling or disposal facility.

(76) "Transport vehicle" means a vehicle capable of hauling solid waste such as a truck, packer, or trailer that may be used by refuse haulers to transport solid waste from the point of generation to a transfer station or a disposal facility.

(77) "Treated wood" means any wood item that has been treated with the following or compounds containing the

following:

- (a) creosote or related compounds;
- (b) Arsenic;
- (c) Chromium; or
- (d) Copper.

(78) "Twenty-five year storm" means a 24-hour storm of such intensity that it has a 4% probability of being equaled or exceeded any given year. The storm could result in what is referred to as a 25-year flood.

(79) "Unit" or "Solid Waste Management Unit" means a distinct operational storage, treatment, or disposal area at a solid waste management facility that contains all features to render it capable of performing its intended function and of being closed as a separate entity.

(80) "Unit boundary" means a vertical surface located at the hydraulically downgradient limit of a landfill unit or other solid waste disposal facility unit which is required to monitor ground water. This vertical surface extends down into the ground water.

(81) "Unstable area" means a location that is susceptible to natural or human induced events or forces capable of impairing the integrity of some or all of the landfill structural components responsible for preventing releases from a facility. Unstable areas can include poor foundation conditions, areas susceptible to mass movements, and karst terrains.

(82) "Vadose zone" means the zone of aeration including soil and capillary water. The zone is bound above by the land surface and below by the water table.

(83) "Vector" means a living animal including insect or other arthropod which is capable of transmitting an infectious disease from one organism to another.

(84) "Washout" means the carrying away of solid waste by waters of a base or 100-year flood.

(85) "Waste tire storage facility" or "waste tire pile" means any site where more than 1,000 waste tires or 1,000 passenger tire equivalents are stored on the ground.

- (a) A waste tire storage facility includes:
 - (i) whole waste tires used as a fence;
 - (ii) whole waste tires used as a windbreak; and
 - (iii) waste tire generators where more than 1,000 waste tires are held.

(b) A waste tire storage facility does not include:

- (i) a site where waste tires are stored exclusively in buildings or in trailers;

(ii) if whole waste tires are stored for five or fewer days, the site of a registered tire recycler or a processor for a registered tire recycler;

(iii) a permitted solid waste disposal facility that stores whole tires in piles for not longer than one year;

(iv) a staging area where tires are temporarily placed on the ground, not stored, to accommodate activities such as sorting, assembling, or loading or unloading of trucks; or

(v) a site where waste tires or material derived from waste tires are stored for five or fewer days and are used for ballast to maintain covers on agricultural materials or to maintain covers at a construction site or are to be recycled or applied to a beneficial use.

(c) Tires attached to a vehicle are not considered waste tires until they are removed from the vehicle.

(86) "Wetlands" means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal conditions do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

(87) "Yard waste" means vegetative matter resulting from landscaping, land maintenance, and land clearing operations including grass clippings, prunings, and other discarded material generated from yards, gardens, parks, and similar types of

facilities. Yard waste does not include garbage, paper, plastic, processed wood, sludge, septage, or manure.

R315-301-3. Owner Responsibilities for Solid Waste.

The owner, operator or occupant of any premises or business establishment shall be responsible for the management and disposal of all solid waste generated or accumulated by the owner, operator, or occupant of the property in compliance with the Utah Solid Waste Permitting and Management Rules and the Utah Solid and Hazardous Waste Act.

R315-301-4. Prohibition of Illegal Disposal or Incineration of Solid Waste.

(1) No person shall incinerate, burn, or otherwise dispose of any solid waste in any place except at a facility which is in compliance with the requirements of Rules R315-301 through 320 and other applicable rules.

(2) When any solid waste is disposed in a manner not in compliance with the requirements of Rules R315-301 through 320, or other applicable rules, the property owner of the disposal site or the person responsible for the illegal disposal or both:

(a) shall remove the solid waste from the illegal disposal site to a permitted solid waste disposal facility and, if necessary, shall remediate the site; or

(b) shall apply for a permit from the Director and shall meet all of the following:

(i) submit the required permit application in the time frame specified by the Director and respond promptly to all requests for information from the Director related to the permit application;

(ii) shall immediately meet all of the operational monitoring and waste handling criteria of Rules R315-301 through 320; and

(iii) shall follow the requirements of Rule R315-301-4(2)(a) if a permit is not granted.

(3) Any person disposing of solid waste in a manner not in compliance with the requirements of Rules R315-301 through 320, or other applicable rules, may be subject to enforcement action in addition to meeting the requirements of Rule R315-301-4(2).

(4) When deposition or disposal of the following materials does not cause a hazard to human health or the environment or cause a public nuisance, the requirements of Rules R315-301 through 320 do not apply to:

(a) inert waste used as fill material;

(b) the disposal of mine tailings and overburden;

(c) the disposal of vegetative material generated as a result of land clearing; or

(d) the disposal of vegetative agricultural waste.

R315-301-5. Permit Required.

(1) No solid waste disposal facility shall be established, operated, maintained, or expanded until the owner or operator of such facility has obtained a permit from the Director and has received a letter of approval from the Director to accept waste.

(2) The owner or operator of a solid waste disposal facility shall operate the facility in accordance with the conditions of the permit and otherwise follow the permit.

(3) In areas where no public or duly licensed disposal service is available, the on-site disposal, by burial, of on-site generated nonhazardous solid waste from a single family farm or a single family ranch does not require a permit.

R315-301-6. Protection of Human Health and the Environment.

(1) The management of solid waste shall not present a threat to human health or the environment.

(2) Any contamination of the ground water, surface water, air, or soil that results from the management of solid waste

which presents a threat to human health or the environment shall be remediated through appropriate corrective action.

KEY: solid waste management, solid waste disposal

August 31, 2017

19-6-105

Notice of Continuation February 13, 2013

19-6-108

19-6-109

40 CFR 258

R315. Environmental Quality, Waste Management and Radiation Control, Waste Management.**R315-304. Industrial Solid Waste Landfill Requirements.****R315-304-1. Applicability.**

(1) The requirements of Rule R315-304 apply to each Class III Landfill as specified.

(2) The requirements of Rule R315-304 do not apply to the following materials managed at an industrial facility:

(a) fly ash waste, bottom ash waste, slag waste, or flue gas emission control dust generated primarily from the combustion of coal or other fossil fuels;

(b) wastes from the extraction, beneficiation, and processing of ores and minerals;

(c) electric arc furnace slag, open hearth furnace slag, and other slags generated during carbon steel production; and

(d) cement kiln dust.

R315-304-2. Industrial Landfill Standards for Performance.

Each Class III Landfill shall meet the landfill standards for performance as specified in Section R315-303-2.

R315-304-3. Definitions.

Terms used in Rule R315-304 are defined in Section R315-301-2. In addition, for the purpose of Rule R315-304, the following definitions apply.

(1) "Class IIIa Landfill" means a landfill as defined by Subsection R315-301-2(9) that may accept:

(a) any nonhazardous industrial waste;

(b) waste that is exempt from hazardous waste regulations under Section R315-2-4; or

(c) very small quantity generator hazardous waste as defined by Section R315-260-10.

(2) "Class IIIb Landfill" means a landfill as defined by Subsection R315-301-2(9) that may accept any nonhazardous industrial solid waste except:

(a) waste that is exempt from hazardous waste regulations under Section R315-2-4, excluding Subsections R315-2-4(b)(3), (4), (5), (7), and (14), unless approved by the Director; or

(b) very small quantity generator hazardous waste as defined by Section R315-260-10.

R315-304-4. Industrial Landfill Location Standards.

(1) Class IIIa Landfills.

(a) A new Class IIIa Landfill shall meet the location standards of Subsection R315-302-1(2).

(b) A new Class IIIa Landfill that is proposed on the site of generation of the industrial solid waste or a lateral expansion of an existing Class IIIa Landfill, shall meet the location standards of Subsections R315-302-1(2)(b), (c), (d), and (e) with respect to geology, surface water, wetlands, and ground water.

(c) An existing Class IIIa Landfill shall not be subject to the location standards of Subsection R315-302-1(2).

(d) An exemption from any location standard of Subsection R315-302-1(2), except the standards for floodplains and wetlands, may be granted by the Director on a site specific basis if it is determined that the exemption will cause no adverse impacts to human health or the environment.

(i) No exemption may be granted without application to the Director.

(ii) If an exemption is granted, the landfill may be required to have more stringent design, construction, monitoring program, or operational practice to protect human health or the environment.

(2) Class IIIb Landfills.

(a) A new Class IIIb landfill or a lateral expansion of an existing Class IIIb Landfill shall be subject to the following location standards:

(i) the standards with respect to floodplains as specified in

Subsection R315-302-1(2)(c)(ii);

(ii) the standards with respect to wetlands as specified in Subsection R315-302-1(2)(d);

(iii) the standards with respect to ground water as specified in Subsection R315-302-1(2)(e)(i)(B); and

(iv) the requirements of Subsection R315-302-1(2)(f).

(b) For a lateral expansion of an existing Class IIIb Landfill, an exemption from any location standard of Subsection R315-304-4(2)(a) may be granted by the Director on a site specific basis if it is determined that the exemption will cause no adverse impacts to human health or the environment.

(i) No exemption may be granted without application to the Director.

(ii) If an exemption is granted, the landfill may be required to have more stringent design, construction, monitoring, or operation than the minimum described in Rule R315-304 to protect human health or the environment.

(c) An existing Class IIIb Landfill shall not be subject to the location standards of Subsection R315-304-4(2)(a).

R315-304-5. Industrial Landfill Requirements.

(1) Each Class III Landfill shall meet the following applicable requirements, as determined by the Director:

(a) the plan of operation requirements of Subsections R315-302-2(2)(a), (b), (c), (d), (g), (i), (j), (k), (l), (m), (n), and (o);

(b) the recordkeeping requirements of Subsections R315-302-2(3)(a), (b)(i), (iii), (iv), and (vi);

(c) the reporting requirements of Subsection R315-302-2(4); and

(d) the inspection requirements of Subsection R315-302-2(5).

(2) Each Class III Landfill shall meet the applicable general requirements for closure and post-closure care of Subsections R315-302-2(6); R315-302-3(2); (3); (4)(a), and (b); (5); (6)(a)(iv) through (vi), (6)(b), and (c); and (7)(a) as determined by the Director.

(a) Each Class IIIa Landfill shall meet the closure requirements of Subsection R315-303-3(4).

(b) Each Class IIIb Landfill shall meet the closure requirements of Subsection R315-305-5(5)(b).

(c) If a Class III Landfill is already subject to the closure and post-closure requirements of another Federal or state agency which are as stringent as specified in Subsections R315-304-5(2)(a) or (b), the landfill may be exempt, upon approval of the Director, from the closure requirements of Subsections R315-304-5(2)(a) or (b).

(3) Standards for Design.

(a) The owner or operator of a Class III Landfill shall design the landfill to minimize the acceptance of liquids and control storm water run-on/run-off as specified in Subsections R315-303-3(1)(b), (c), and (d).

(b) The owner or operator of a Class III Landfill shall design the landfill to meet the requirements of Subsections R315-303-3(7)(a), (c), (e), (f), (g), (h), and (i) as determined by the Director.

(4) Ground Water Monitoring.

(a) The owner or operator of a Class IIIa Landfill shall monitor the ground water beneath the landfill as specified in Rule R315-308.

(b) Subject to the performance standard of Subsection R315-303-2(1), if the owner or operator of a Class IIIa Landfill is monitoring the ground water beneath the landfill and otherwise meeting the requirements of a discharge permit as issued by the Utah Division of Water Quality, the landfill may be exempt, upon approval of the Director, from the ground water monitoring requirements of Rule R315-308.

(c) A Class IIIb Landfill is exempt from the ground water monitoring requirements of Rule R315-308.

(5) Standards for Operation.

(a) Each Class IIIa Landfill shall meet the standards of Section R315-303-4 except:

(i) for the requirements of Subsections R315-303-4(2)(f) and R315-303-4(6); and

(ii) may be exempt from the daily cover requirements of Subsection R315-303-4(4) upon the demonstration that an alternate schedule for the covering of waste at the landfill will not present a threat to human health or the environment.

(b) Each Class IIIb Landfill shall meet the requirements for operation in Subsections R315-305-4(7) and R315-305-5(2) through (4) as determined by the Director.

(6) Financial Assurance.

(a) The owner or operator of each Class III Landfill shall establish financial assurance as required by Rule R315-309.

(b) If the owner or operator of a Class III Landfill has financial assurance, in effect and active, that covers the costs of closure and post-closure care of the landfill as required by another Federal or state agency which is as stringent as the requirements of Rule R315-309, the landfill may be exempt, upon approval of the Director, from the financial assurance requirements of Rule R315-309.

(7) Permit Requirements.

Each Class III Landfill shall apply for and obtain a permit to operate by meeting the applicable requirements of Rule R315-310.

KEY: solid waste management, solid waste disposal

August 31, 2017

19-6-105

Notice of Continuation February 13, 2013

19-6-108

40 CFR 257

R315. Environmental Quality, Waste Management and Radiation Control, Waste Management.

R315-305. Class IV and VI Landfill Requirements.

R315-305-1. Applicability.

(1) These standards apply to each facility that landfills only:

(a) construction/demolition waste, inert waste, yard waste, dead animals;

(b) upon meeting the requirements of Section 19-6-804 and Subsections R315-320-3(1) or (2), waste tires and material derived from waste tires; or

(c) upon meeting the requirements of R315-315-8(3), petroleum contaminated soils.

(2) Inert waste used as road building material and fill material are excluded from the requirements of Rule R315-305.

R315-305-2. Class IV and VI Landfill Standards for Performance.

Each Class IV and VI Landfill shall meet the landfill standards for performance as specified in Section R315-303-2.

R315-305-3. Definitions.

Terms used in Rule R315-305 are defined in Section R315-301-2. In addition, for the purpose of Rule R315-305, the following definitions apply.

(1) "Class IVa Landfill" means a Class IV Landfill that receives, based on an annual average, over 20 tons of waste per day and may receive, as a component of construction/demolition waste, waste from a very small quantity generator of hazardous waste, as defined by Section R315-260-10.

(2) "Class IVb Landfill" means a Class IV Landfill that receives, based on an annual average, 20 tons, or less, of waste per day or demonstrates that no waste from a very small quantity generator of hazardous waste, as defined by Section R315-260-10 is accepted.

R315-305-4. General Requirements.

(1) Location Standards.

(a) A new Class IVa Landfill shall meet the location standards of Subsection R315-302-1(2).

(b) A new Class IVb or VI Landfill or the expansion of an existing Class IVb or VI Landfill shall be subject to the following location standards:

(i) the standards with respect to floodplains as specified in Subsection R315-302-1(2)(c)(ii);

(ii) the standards with respect to wetlands as specified in Subsection R315-302-1(2)(d);

(iii) the standards with respect to ground water as specified in Subsection R315-302-1(2)(e)(i)(B);

(iv) the standards with respect to geology as specified in Subsections R315-302-1(2)(b)(i) and (iv);

(v) if the permit application for a new Class IVb, or VI Landfill requests approval to accept dead animals for disposal, the application shall document that the landfill also meets the land use compatibility requirements of Subsections R315-302-1(2)(a)(i), (ii), (iv), and (v); and

(vi) The requirements of Subsection R315-302-1(2)(f).

(c) Exemptions from the location standards of Subsection R315-305-4(1)(b)(i), (ii), (iii), (iv), and (v) may be granted by the Director for a new Class IVb or VI Landfill, on a site specific bases, if it is determined that the exemption will cause no adverse impact to human health or the environment.

(i) No exemption may be granted without application to the Director.

(ii) If an exemption is granted, the landfill may be required to meet more stringent design, construction, monitoring, or operation requirements than the minimum described in Rule R315-305 to protect human health or the environment.

(d) An existing Class IVa, IVb, or VI Landfill:

(i) shall not be subject to the location standards of Subsections R315-305-4(1)(a) or R315-305-4(1)(b)(i), (ii), (iii), or (iv); but

(ii) if the current permit of an existing Class IVa, IVb, or VI Landfill does not allow the acceptance of dead animals and the owner or operator requests approval to accept dead animals for disposal, the request to the Director shall document that the landfill also meets the land use compatibility requirements of Subsections R315-302-1(2)(a)(i), (ii), (iv), and (v).

(2) An owner or operator of a Class IV or VI Landfill shall obtain a permit, as set forth in Rule R315-310.

(3) An owner or operator of a Class IV or VI Landfill shall design and operate the landfill to:

(a) prevent the run-on of all surface waters resulting from a maximum flow of a 25-year storm into the active area of the landfill; and

(b) collect and treat, if necessary, the run-off of surface waters and other liquids resulting from a 25-year storm from the active area of the landfill.

(4) An owner or operator of a Class IVa Landfill shall monitor the ground water beneath the landfill as specified in Rule R315-308.

(5) An owner or operator of a Class IV or VI Landfill shall erect a sign at the facility entrance as specified in Subsection R315-303-3(7)(d).

(6) An owner or operator of a Class IV or VI Landfill shall maintain the applicable records as specified in Subsection R315-302-2(3).

(7) An owner or operator of a Class IV or VI Landfill shall meet the requirements of Subsection R315-302-2(6) and make the required recording with the county recorder.

R315-305-5. Requirements for Operation.

(1) The owner or operator of a Class IV or VI Landfill shall not accept any other form of waste except the wastes specified in Subsection R315-305-1(1).

(2) The owner or operator of a Class IV or VI Landfill shall prevent the disposal of unauthorized waste by ensuring that at least one person is on site during hours of operation and shall prevent unauthorized disposal during off-hours by controlling entry, i.e., lockable gate or barrier, when the facility is not open.

(3) The owner or operator of a Class IV or VI Landfill shall:

(a) minimize the size of the working face as required by Subsection R315-303-3(7)(g);

(b) employ measures to prevent emission of fugitive dusts, when weather conditions or climate indicate that transport of dust off-site is liable to create a nuisance;

(c) meet the requirements of Subsection R315-303-3(1)(a) and (b) to minimize liquids admitted to the landfill;

(d) collect scattered litter as necessary to avoid a fire hazard or an aesthetic nuisance; and

(e) prohibit scavenging.

(4) The owner or operator of a Class IV or VI Landfill shall cover timbers, wood, and other combustible waste with a minimum of six inches of soil, or equivalent, as needed to avoid a fire hazard.

(5) The owner or operator of a Class IV or VI Landfill shall meet the applicable general requirements of closure and post-closure care of Section R315-302-3 as determined by the Director.

(a) The owner or operator of a Class IVa Landfill shall meet the specific closure requirements of Subsection R315-303-3(4).

(b) The owner or operator of a Class IVb or VI Landfill shall close the facility by:

(i) leveling the waste to the extent practicable;

(ii) covering the waste with a minimum of two feet of soil,

including six inches of topsoil;

(iii) contouring the cover as specified in Subsection R315-303-3(4)(a)(i)(B); and

(iv) seeding the cover with grass, other shallow rooted vegetation, or other native vegetation or covering in another manner approved by the Director to minimize erosion.

(v) The Director may approve an alternative final cover design for a Class IVb or VI Landfill if it is documented that the alternative final cover provides equivalent protection from infiltration and erosion as the cover specified in Subsection R315-305-5(5)(b).

KEY: solid waste management, solid waste disposal

August 31, 2017 19-6-104

Notice of Continuation February 13, 2013 19-6-105

19-6-108

19-6-109

40 CFR 257

R317. Environmental Quality, Water Quality.**R317-1. Definitions and General Requirements.****R317-1-1. Definitions.**

Note that some definitions are repeated from statute to provide clarity to readers.

"Assimilative Capacity" means the difference between the numeric criteria and the concentration in the waterbody of interest where the concentration is less than the criterion.

"Biological assessment" means an evaluation of the biological condition of a water body using biological surveys and other direct measurements of composition or condition of the resident living organisms.

"Biological criteria" means numeric values or narrative descriptions that are established to protect the biological condition of the aquatic life inhabiting waters that have been given a certain designated aquatic life use.

"Board" means the Utah Water Quality Board.

"BOD" means 5-day, 20 degrees C. biochemical oxygen demand.

"Body Politic" means the State or its agencies or any political subdivision of the State to include a county, city, town, improvement district, taxing district or any other governmental subdivision or public corporation of the State.

"Building sewer" means the pipe which carries wastewater from the building drain to a public sewer, a wastewater disposal system or other point of disposal. It is synonymous with "house sewer".

"CBOD" means 5-day, 20 degrees C., carbonaceous biochemical oxygen demand.

"Challenging Party" means a Person who has or is seeking a permit in accordance with Title 19, Chapter 5, the Utah Water Quality Act and chooses to use the independent peer review process to challenge a Proposal as defined in Subsection 19-5-105.3(1)(a).

"COD" means chemical oxygen demand.

"Conflict of Interest" means a Person who has any financial or other interest which has the potential to negatively affect services to the Division or Challenging Party because it could impair the individual's objectivity or it could create an unfair competitive advantage for any Person or organization.

"Deep well" means a drinking water supply source which complies with all the applicable provisions of the State of Utah Public Drinking Water rules.

"Digested sludge" means sludge in which the volatile solids content has been reduced by at least 38% using a suitable biological treatment process.

"Director" means the Director of the Division of Water Quality.

"Division" means the Utah State Division of Water Quality.

"Domestic wastewater" means a combination of the liquid or water-carried wastes from residences, business buildings, institutions, and other establishments with installed plumbing facilities, together with those from industrial establishments, and with such ground water, surface water, and storm water as may be present. It is synonymous with the term "sewage".

"Effluent" means the liquid discharge from any unit of a wastewater treatment works, including a septic tank.

"Existing Uses" means those uses actually attained in a water body on or after November 28, 1975, whether or not they are included in the water quality standards.

"Expert" means a person with technical expertise, knowledge, or skills in a subject matter of relevance to a specific water quality investigation, HISA, or Proposal including persons from other regulatory agencies, academia, or the private sector.

"Human-induced stressor" means perturbations directly or indirectly caused by humans that alter the components, patterns, and/or processes of an ecosystem.

"Human pathogens" means specific causative agents of disease in humans such as bacteria or viruses.

"Highly Influential Scientific Assessment (HISA)" means a Scientific Assessment developed by the Division or an external Person, that has material relevance to a decision by the Division, and the Director determines could have a significant financial impact on either the public or private sector or is novel, controversial, or precedent-setting, and is not a new or renewed permit issued to a Person.

"Independent Peer Review" means scientific review conducted on request from a Challenging Party in accordance with Section 19-5-105.3 and is a subcategory of Independent Scientific Review.

"Independent Scientific Review" means any technical or scientific review conducted by Experts in an area related to the material being reviewed who were not directly or indirectly involved with the development of the material to be reviewed and who do not have a real or perceived conflict of interest. When an Independent Peer Review is conducted, the conditions in Subsection 19-5-105.3(5) shall apply.

"Industrial wastes" means the liquid wastes from industrial processes as distinct from wastes derived principally from dwellings, business buildings, institutions and the like. It is synonymous with the term "industrial wastewater".

"Influent" means the total wastewater flow entering a wastewater treatment works.

"Great Salt Lake impounded wetland" means wetland ponds which have been formed by dikes or berms to control and retain the flow of freshwater sources in the immediate proximity of Great Salt Lake.

"Large underground wastewater disposal system" means the same type of device as an onsite wastewater system except that it is designed to handle more than 5,000 gallons per day of domestic wastewater, or wastewater that originates in multiple dwellings, commercial establishments, recreational facilities, schools, or any other underground wastewater disposal system not covered under the definition of an onsite wastewater system. The Division controls the installation of such systems.

"Onsite wastewater system" means an underground wastewater disposal system for domestic wastewater which is designed for a capacity of 5,000 gallons per day or less and is not designed to serve multiple dwelling units which are owned by separate owners except condominiums and twin homes. It usually consists of a building sewer, a septic tank and an absorption system.

"Operating Permit" is a State issued permit issued to any wastewater treatment works covered under Rules R317-3 or R317-5 with the following exceptions:

A. Any wastewater treatment permitted under Ground Water Quality Protection Rule R317-6.

B. Any wastewater treatment permitted under Underground Injection Control (UIC) Program Rule R317-7.

C. Any wastewater treatment permitted under Utah Pollutant Discharge Elimination System (UPDES) Rule R317-8.

D. Any wastewater treatment permitted under Approvals and Permits for a Water Reuse Project Rule R317-13.

E. Any wastewater treatment permitted by a Local Health Department under Onsite Wastewater Systems Rule R317-4.

"Person" means any individual, trust, firm, estate, company, corporation, partnership, association, state, state or federal agency or entity, municipality, commission, or political subdivision of a state. "Point source" means any discernible, confined and discrete conveyance including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, concentrated animal feeding operation, or vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flow from irrigated agriculture.

"Pollution" means such contamination, or other alteration of the physical, chemical, or biological properties of any waters of the state, or such discharge of any liquid, gaseous or solid

substance into any waters of the state as will create a nuisance or render such waters harmful or detrimental or injurious to public health, safety or welfare, or to domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses, or to livestock, wild animals, birds, fish or other aquatic life.

"Proposal" means any science-based initiative proposed by the division on or after January 1, 2016, that would financially impact a Challenging Party and that would:

- A. change water quality standards;
- B. develop or modify total maximum daily load requirements;
- C. modify wasteloads or other regulatory requirements for permits; or

D. change rules or other regulatory guidance. A Proposal is not an individual permit issued to a Person, nor is it a technology based limit applied in accordance with Effluent limitations, 33 U.S.C. Sec. 1311, National pollutant discharge elimination system, 33 U.S.C. Sec. 1342, and Information and guidelines, 33 U.S.C. Sec. 1314.

"Regulatory requirements" for permits means the methods or policies used by the Division to derive permit limits such as wasteload analyses, reasonable potential determinations, whole effluent toxicity policy, interim permitting guidance, antidegradation reviews, or Technology Based Nutrient Effluent Limit requirements.

"Scientific Assessment" means an evaluation of a body of credible scientific or technical knowledge that synthesizes scientific literature, data analysis and interpretation, and models, and includes any assumptions used to bridge uncertainties in the available information.

"Scientific basis" means empirical data or other scientific findings, conclusions, or assumptions used as the justification for a rule, regulatory guidance, or a regulatory tool.

"Scientifically necessary to protect the designated beneficial uses of a waterbody" as referenced in Subsection 19-5-105.3(8) means a Technology Based Nutrient Effluent Limit that under current and future growth projections, will:

- A. prevent circumstances that would cause or contribute to an impairment of any designated or existing use in the receiving water or downstream water bodies based on Utah's water quality standards, Section R317-2-7; or
- B. improve water quality conditions that are causing or contributing to any existing impairment in the receiving water or downstream water bodies, as defined by Utah's water quality standards, Section R317-2-7.

"Sewage" is synonymous with the term "domestic wastewater".

"Shallow well" means a well providing a source of drinking water which does not meet the requirements of a "deep well".

"Sludge" means the accumulation of solids which have settled from wastewater. As initially accumulated, and prior to treatment, it is known as "raw sludge".

"SS" means suspended solids.

"Technology Based Nutrient Effluent Limit" means maximum nutrient limitations based on the availability of technology to achieve the limitations, rather than based on a water quality standard or a total maximum daily load.

Total Maximum Daily Load (TMDL) means the maximum amount of a particular pollutant that a waterbody can receive and still meet state water quality standards, and an allocation of that amount to the pollutant's sources.

"Treatment works" means any plant, disposal field, lagoon, dam, pumping station, incinerator, or other works used for the purpose of treating, stabilizing or holding wastes. (Section 19-5-102).

"TSS" means total suspended solids.

"Underground Wastewater Disposal System" means a system for underground disposal of domestic wastewater. It

includes onsite wastewater systems and large underground wastewater disposal systems.

"Use Attainability Analysis" means a structured Scientific Assessment of the factors affecting the attainment of the uses specified in Section R317-2-6. The factors to be considered in such an analysis include the physical, chemical, biological, and economic use removal criteria as described in 40 CFR 131.10(g) (1-6).

"Wastes" means dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste discharged into water. (Section 19-5-102).

"Wastewater" means sewage, industrial waste or other liquid substances which might cause pollution of waters of the state. Intercepted ground water which is uncontaminated by wastes is not included.

"Waters of the state" means all streams, lakes, ponds, marshes, water-courses, waterways, wells, springs, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface and underground, natural or artificial, public or private, which are contained within, flow through, or border upon this state or any portion thereof, except that bodies of water confined to and retained within the limits of private property, and which do not develop into or constitute a nuisance, or a public health hazard, or a menace to fish and wildlife, shall not be considered to be "waters of the state" under this definition (Section 19-5-102).

"Water Quality Based Effluent Limit (WQBEL)" means an effluent limitation that has been determined necessary to ensure that water quality standards in a receiving body of water will not be violated.

R317-1-2. General Requirements.

2.1 Water Pollution Prohibited. No person shall discharge wastewater or deposit wastes or other substances in violation of the requirements of these rules.

2.2 Construction Permit. No person shall make or construct any device for treatment or discharge of wastewater (including storm sewers) without first receiving a permit to do so from the Director or its authorized representative, except as provided herein.

A. Body Politic Required. A permit for construction of a new treatment works or a sewerage system, or modifications to an existing treatment works or sewerage system for multiple units under separate ownership will be issued only if the treatment works or sewerage system are under the sponsorship of a body politic as defined in R317-1-1.

B. Submission of Plans. Any person desiring a permit shall submit complete plans, specifications, and other pertinent documents covering the proposed construction to the Director for review. Liquid waste storage facilities at animal feeding operations must be designed and constructed in accordance with Table 2a - Criteria for Siting, Investigation, and Design of Liquid Waste Storage Facilities with a water depth greater than 2 feet; Table 2b - Criteria for Siting, Investigation, and Design of Liquid Waste Storage Facilities with a water depth of 2 feet or less; and Table 2c - Criteria for runoff ponds with a water depth of 2 feet or less and a storage period less than 90 days annually, contained in the U.S.D.A. Natural Resource Conservation Service (NRCS) Conservation Practice Standard, Waste Storage Facility, Code 313, dated August 2006. This rule incorporates by reference Tables 2a, 2b, and 2c in the August 2006 U.S.D.A. NRCS Conservation Practice Standard, Waste Storage Facility, Code 313.

C. Review of Plans. The Division shall review said plans and specifications as to their adequacy of design for the intended purpose and shall require such changes as are found

necessary to assure compliance with pertinent parts of these rules.

D. Approval of Plans. Issuance of a construction permit shall be construed as approval of plans for the purposes of authorizing release of federal or state funds allocated for planning or construction purposes.

E. Permit Expiration. Construction permits shall expire one year after date of issuance unless substantial and continuous construction is under way. Upon application, construction permits may be extended on an individual basis provided application for such extension is made prior to the permit expiration date.

F. Exceptions.

1. Wastewater facilities that discharge to an existing sewer system and serve only units that are under single ownership, or serve multiple units under separate ownership where the wastewater facilities are under the sponsorship of the public sewer system to which they discharge. This exception does not apply to pumping stations having the installed capacity in excess of 1 million gallons per day (3,785 cubic meters per day).

2. Onsite Wastewater Disposal Systems. Construction plans and specifications for onsite wastewater disposal systems shall be submitted to the local health authority having jurisdiction and need not be submitted to the Division. Such devices, in any case, shall be constructed in accordance with rules for onsite wastewater disposal systems adopted by the Water Quality Board. Compliance with the rules shall be determined by an on-site inspection by the appropriate health authority.

3. Small Animal Waste (Manure) Lagoons and Runoff Ponds. Construction plans and specifications for small animal waste lagoons as defined in R317-6 (permitted by rule for ground water permits) need not be submitted to the Division if the design is prepared or certified by the U.S.D.A. Natural Resources Conservation Service (NRCS) in accordance with criteria provided for in the Memorandum of Agreement between the Division and the NRCS, and the construction is inspected by the NRCS. Compliance with these rules shall be determined by on-site inspection by the NRCS.

2.3 Compliance with Water Quality Standards. No person shall discharge wastes into waters of the state except in compliance with these rules and under circumstances which assure compliance with water quality standards in R317-2.

2.4 Operation of Wastewater Treatment Works. Wastewater treatment works shall be so operated at all times as to produce effluents meeting all requirements of these rules and otherwise in a manner consistent with adequate protection of public health and welfare. Complete daily records shall be kept of the operation of wastewater treatment works covered under R317-3 on forms approved by the Division and a copy of such records shall be forwarded to the Division at monthly intervals.

R317-1-3. Requirements for Waste Discharges.

3.1 Compliance With Water Quality Standards.

All persons discharging wastes into any of the waters of the State shall provide the degree of wastewater treatment determined necessary to insure compliance with the requirements of Rule R317-2 Water Quality Standards, except that the Director may waive compliance with these requirements for specific criteria listed in Rule R317-2 where it is determined that the designated use is not being impaired or significant use improvement would not occur or where there is a reasonable question as to the validity of a specific criterion or for other valid reasons as determined by the Director.

3.2 Compliance With Secondary Treatment Requirements.

All persons discharging wastes from point sources into any of the waters of the State shall provide treatment processes which will produce secondary effluent meeting or exceeding the following effluent quality standards.

A. The arithmetic mean of BOD values determined on effluent samples collected during any 30-day period shall not exceed 25 mg/L, nor shall the arithmetic mean exceed 35 mg/L during any 7-day period. In addition, if the treatment plant influent is of domestic or municipal sewage origin, the BOD values of effluent samples shall not be greater than 15% of the BOD values of influent samples collected in the same time period. As an alternative, if agreed to by the person discharging wastes, the following effluent quality standard may be established as a requirement of the discharge permit and must be met: The arithmetic mean of CBOD values determined on effluent samples collected during any 30-day period shall not exceed 20 mg/L nor shall the arithmetic mean exceed 30 mg/L during any 7-day period. In addition, if the treatment plant influent is of domestic or municipal sewage origin, the CBOD values of effluent samples shall not be greater than 15% of the CBOD values of influent samples collected in the same time period.

B. The arithmetic mean of SS values determined on effluent samples collected during any 30-day period shall not exceed 25 mg/L, nor shall the arithmetic mean exceed 35 mg/L during any 7-day period. In addition, if the treatment plant influent is of domestic or municipal sewage origin, the SS values of effluent samples shall not be greater than 15% of the SS values of influent samples collected in the same time period.

C. The geometric mean of total coliform and fecal coliform bacteria in effluent samples collected during any 30-day period shall not exceed either 2000 per 100 mL or 200 per 100 mL respectively, nor shall the geometric mean exceed 2500 per 100 mL or 250 per 100 mL respectively, during any 7-day period; or, the geometric mean of E. coli bacteria in effluent samples collected during any 30-day period shall not exceed 126 per 100 mL nor shall the geometric mean exceed 158 per 100 mL respectively during any 7-day period. Exceptions to this requirement may be allowed by the Director where domestic wastewater is not a part of the effluent and where water quality standards are not violated.

D. The effluent values for pH shall be maintained within the limits of 6.5 and 9.0.

E. Exceptions to the 85% removal requirements may be allowed where infiltration makes such removal requirements infeasible and where water quality standards are not violated.

F. The Director may allow exceptions to the requirements of Subsections R317-1-3.2.A, R317-1-3.2.B, and R317-1-3.2.D where the discharge will be of short duration and where there will be no significant detrimental effect on receiving water quality or downstream beneficial uses.

G. The Director may allow that the BOD5 and TSS effluent concentrations for discharging domestic wastewater lagoons shall not exceed 45 mg/L for a monthly average nor 65 mg/L for a weekly average provided the following criteria are met:

1. the lagoon system is operating within the organic and hydraulic design capacity established by Rule R317-3;
2. the lagoon system is being properly operated and maintained;
3. the treatment system is meeting all other permit limits;
4. there are no significant or categorical industrial users (IU) defined by 40 CFR Part 403, unless it is demonstrated to the satisfaction of the Director that the IU is not contributing constituents in concentrations or quantities likely to significantly affect the treatment works; and
5. a Waste Load Allocation (WLA) indicates that the increased permit limits would not impair beneficial uses of the receiving stream.

3.3 Technology-based Limits for Controlling Phosphorus Pollution.

A. Technology-based Phosphorus Effluent Limits (TBPEL)

1. All non-lagoon treatment works discharging wastewater to surface waters of the state shall provide treatment processes which will produce effluent less than or equal to an annual mean of 1.0 mg/L for total phosphorus.

2. The TBPEL shall be achieved by January 1, 2020, or no later than January 1, 2025, after a variance has been granted under Subsection R317-1-3.3.C.1.e.

B. Discharging Lagoons -Phosphorus Loading Cap

1. No TBPEL will be instituted for discharging treatment lagoons. Instead, each discharging lagoon will be evaluated to determine the current annual average total phosphorus load measured in pounds per year based on monthly average flow rates and concentrations. Absent field data to determine these loads, and in case of intermittent discharging lagoons, the phosphorus load cap will be estimated by the Director.

2. A cap of 125% of the current annual total phosphorus load will be established and referred to as phosphorus loading cap. Once the lagoon's phosphorus loading cap has been reached, the owner of the facility will have five years to construct treatment processes or implement treatment alternatives to prevent the total phosphorus loading cap from being exceeded.

3. The load cap shall become effective July 1, 2018.

C. Variances for TBPEL and Phosphorus Loading Caps

1. The Director may authorize a variance to the TBPEL or phosphorus loading cap under any of the following conditions:

- Where an existing TMDL has allocated a total phosphorus wasteload to a treatment works, no TBPEL or phosphorus loading cap, as applicable, will be applied.

- If the owner of a discharging treatment works can demonstrate that imposing the TBPEL or phosphorus loading cap would result in an economic hardship, an alternative TBPEL or phosphorus loading cap that would not cause economic hardship may be applied. "Economic hardship" for a publicly owned treatment works is defined as sewer service costs that, as a result of implementing a TBPEL or phosphorus loading cap, would be greater than 1.4% of the median adjusted gross household income of the service area based on the latest information compiled by the Utah State Tax Commission, after inclusion of grants, loans, or other funding made available by the Utah Water Quality Board or other sources. The Director will consider other demonstrations of economic hardship on a case-by-case basis.

- If the owner of a discharging treatment works can demonstrate that the TBPEL or phosphorus loading cap are clearly unnecessary to protect waters downstream from the point of discharge, no TBPEL or phosphorus loading cap will be applied.

- If the owner of the discharging treatment works can demonstrate that a commensurate phosphorus reduction can be achieved in receiving waters using innovative alternative approaches such as water quality trading, seasonal offsets, effluent reuse, or land application.

- Where the owner of a non-lagoon discharging treatment works demonstrates due diligence toward construction of a treatment facility designed to meet the TBPEL, the compliance date shall be no later than January 1, 2025.

2. All variances to TBPEL and phosphorus loading caps shall be revisited no more frequently than every five years, or when a substantive change in facility operations or a substantive facility upgrade occurs, to determine if the rationale used to justify the conditions in Subsection R317-1-3.3.C remains applicable.

3. For treatment works required to implement TBPEL or a phosphorus loading cap, the demonstration under Subsection R317-1-3.3.C must be made by January 1, 2018. Unless this demonstration is made, the owner of the discharging treatment works must proceed to implement the TBPEL or phosphorus loading cap, as applicable, in accordance with, respectively,

Subsections R317-1-3.3.A and R317-1-3.3.B.

D. Facility Optimization to Remove Total Inorganic Nitrogen

1. If the owner of a discharging treatment works agrees to optimize the owner's facility, either through operational changes, a capital construction project, or both, to reduce effluent total inorganic nitrogen concentrations to a level agreeable to the Director, a waiver of up to ten years from meeting either water quality-based effluent limits or technology-based effluent limits for total inorganic nitrogen will be granted. This includes meeting any total inorganic nitrogen limit that may result from a TMDL or other water quality study that is specific to the receiving water of the treatment works.

2. The waiver period under this section would begin upon implementation of the optimization improvements or another date agreed to by the owner of the treatment works and the Director.

3. The elements of the waiver under this section will be identified in a compliance agreement that will be incorporated into the facility's UPDES permit.

4. The waiver identified under this section must be granted before January 1, 2020. Thereafter, no such waiver will be considered or granted.

E. Monitoring

1. All discharging treatment works are required to implement, at a minimum, monthly monitoring of:

- influent for total phosphorus (as P) and total Kjeldahl nitrogen (as N) concentrations; and

- effluent for total phosphorus and orthophosphate (as P), and ammonia, nitrate-nitrite, and total Kjeldahl nitrogen (as N).

2. The Director may authorize a variance to the monitoring requirements identified in Subsection R317-1-3.3.D.1.

3. All monitoring under Subsection R317-1-3.3.D shall be based on 24-hour composite samples by use of an automatic sampler or by combining a minimum of four grab samples collected at least two hours apart within a 24-hour period.

4. These monitoring requirements shall be self-implementing beginning July 1, 2015.

3.4 Pollutants In Diverted Water Returned To Stream.

A user of surface water diverted from waters of the State will not be required to remove any pollutants which such user has not added before returning the diverted flow to the original watercourse, provided there is no increase in concentration of pollutants in the diverted water. Should the pollutant constituent concentration of the intake surface waters to a facility exceed the effluent limitations for such facility under a federal National Pollutant Discharge Elimination System permit or a permit issued pursuant to State authority, then the effluent limitations shall become equal to the constituent concentrations in the intake surface waters of such facility. This section does not apply to irrigation return flow.

R317-1-4. Utilization and Isolation of Domestic Wastewater Treatment Works Effluent.

4.1 Untreated Domestic Wastewater. Untreated domestic wastewater or effluent not meeting secondary treatment standards as defined by these rules shall be isolated from all public contact until suitably treated. Land disposal or land treatment of such wastewater or effluent may be accomplished by use of an approved total containment lagoon as defined in R317-3 or by such other treatment approved by the Director as being feasible and equally protective of human health and the environment.

4.2 Use of Secondary Effluent at Plant Site. Secondary effluent may be used at the treatment plant site in the following manner provided there is no cross-connection with a potable water system:

- Chlorinator injector water for wastewater chlorination facilities, provided all pipes and outlets carrying the effluent are

suitably labeled.

B. Water for hosing down wastewater clarifiers, filters and related units, provided all pipes and outlets carrying the effluent are suitably labeled.

C. Irrigation of landscaped areas around the treatment plant from which the public is excluded.

R317-1-5. Use of Industrial Wastewaters.

5.1 Use of industrial wastewaters (not containing human pathogens) shall be considered for approval by the Director based on a case-specific analysis of human health and environmental concerns.

R317-1-6. Disposal of Domestic Wastewater Treatment Works Sludge.

6.1 General. No person shall use, dispose, or otherwise manage sewage sludge through any practice for which pollutant limits, management practices, and operational standards for pathogens and vector attraction reduction requirements are established in 40 CFR 503, July 1, 1994, except in accordance with such requirements.

6.2 Permit. All treatment works producing, treating and disposing of sewage sludge must comply with applicable permit requirements at R317-3, 6 and 8.

6.3 Septic Tank Contents. The dumping or spreading of septic tank contents is prohibited except in conformance with 40 CFR 503 and R317-550-7.

6.4 Effective Date. Notwithstanding the effective date for incorporation by reference of 40 CFR 503 provided in R317-8-1.10(9), those portions of 40 CFR 503 specified in R317-1-6.1 and 6.3 are effective immediately.

R317-1-7. TMDLs.

The following TMDLs are approved by the Board and hereby incorporated by reference into these rules:

- 7.1 Middle Bear River -- February 23, 2010
- 7.2 Chalk Creek -- December 23, 1997
- 7.3 Otter Creek -- December 23, 1997
- 7.4 Little Bear River -- May 23, 2000
- 7.5 Mantua Reservoir -- May 23, 2000
- 7.6 East Canyon Creek -- September 14, 2010
- 7.7 East Canyon Reservoir -- September 14, 2010
- 7.8 Kents Lake -- September 1, 2000
- 7.9 LaBaron Reservoir -- September 1, 2000
- 7.10 Minersville Reservoir -- September 1, 2000
- 7.11 Puffer Lake -- September 1, 2000
- 7.12 Scofield Reservoir -- September 1, 2000
- 7.13 Onion Creek (near Moab) -- July 25, 2002
- 7.14 Cottonwood Wash -- September 9, 2002
- 7.15 Deer Creek Reservoir -- September 9, 2002
- 7.16 Hyrum Reservoir -- September 9, 2002
- 7.17 Little Cottonwood Creek -- September 9, 2002
- 7.18 Lower Bear River -- September 9, 2002
- 7.19 Malad River -- September 9, 2002
- 7.20 Mill Creek (near Moab) -- September 9, 2002
- 7.21 Spring Creek -- September 9, 2002
- 7.22 Forsyth Reservoir -- September 27, 2002
- 7.23 Johnson Valley Reservoir -- September 27, 2002
- 7.24 Lower Fremont River -- September 27, 2002
- 7.25 Mill Meadow Reservoir -- September 27, 2002
- 7.26 UM Creek -- September 27, 2002
- 7.27 Upper Fremont River -- September 27, 2002
- 7.28 Deep Creek -- October 9, 2002
- 7.29 Uinta River -- October 9, 2002
- 7.30 Pineview Reservoir -- December 9, 2002
- 7.31 Browne Lake -- February 19, 2003
- 7.32 San Pitch River -- November 18, 2003
- 7.33 Newton Creek -- June 24, 2004
- 7.34 Panguitch Lake -- June 24, 2004

- 7.35 West Colorado -- August 4, 2004
- 7.36 Silver Creek -- August 4, 2004
- 7.37 Upper Sevier River -- August 4, 2004
- 7.38 Lower and Middle Sevier River -- August 17, 2004
- 7.39 Lower Colorado River -- September 20, 2004
- 7.40 Upper Bear River -- August 4, 2006
- 7.41 Echo Creek -- August 4, 2006
- 7.42 Soldier Creek -- August 4, 2006
- 7.43 East Fork Sevier River -- August 4, 2006
- 7.44 Koosharem Reservoir -- August 4, 2006
- 7.45 Lower Box Creek Reservoir -- August 4, 2006
- 7.46 Otter Creek Reservoir -- August 4, 2006
- 7.47 Thistle Creek -- July 9, 2007
- 7.48 Strawberry Reservoir -- July 9, 2007
- 7.49 Matt Warner Reservoir -- July 9, 2007
- 7.50 Calder Reservoir -- July 9, 2007
- 7.51 Lower Duchesne River -- July 9, 2007
- 7.52 Lake Fork River -- July 9, 2007
- 7.53 Brough Reservoir -- August 22, 2008
- 7.54 Steinaker Reservoir -- August 22, 2008
- 7.55 Red Fleet Reservoir -- August 22, 2008
- 7.56 Newcastle Reservoir -- August 22, 2008
- 7.57 Cutler Reservoir -- February 23, 2010
- 7.58 Pariette Draw -- September 28, 2010
- 7.59 Emigration Creek -- September 1, 2011
- 7.60 Jordan River -- June 27, 2012
- 7.61 Colorado River -- December 5, 2013
- 7.62 Echo Reservoir -- March 26, 2014
- 7.63 Rockport Reservoir -- March 26, 2014
- 7.64 Nine Mile Creek -- October 27, 2016

R317-1-8. Penalty Criteria for Civil Settlement Negotiations.

8.1 Introduction. Section 19-5-115 of the Water Quality Act provides for penalties of up to \$10,000 per day for violations of the act or any permit, rule, or order adopted under it and up to \$25,000 per day for willful violations. Because the law does not provide for assessment of administrative penalties, the Attorney General initiates legal proceedings to recover penalties where appropriate.

8.2 Purpose And Applicability. These criteria outline the principles used by the State in civil settlement negotiations with water pollution sources for violations of the UWPCA and/or any permit, rule or order adopted under it. It is designed to be used as a logical basis to determine a reasonable and appropriate penalty for all types of violations to promote a more swift resolution of environmental problems and enforcement actions.

To guide settlement negotiations on the penalty issue, the following principles apply: (1) penalties should be based on the nature and extent of the violation; (2) penalties should be a minimum, recover the economic benefit of noncompliance; (3) penalties should be large enough to deter noncompliance; and (4) penalties should be consistent in an effort to provide fair and equitable treatment of the regulated community.

In determining whether a civil penalty should be sought, the State will consider the magnitude of the violations; the degree of actual environmental harm or the potential for such harm created by the violation(s); response and/or investigative costs incurred by the State or others; any economic advantage the violator may have gained through noncompliance; recidivism of the violator; good faith efforts of the violator; ability of the violator to pay; and the possible deterrent effect of a penalty to prevent future violations.

8.3 Penalty Calculation Methodology. The statutory maximum penalty should first be calculated, for comparison purposes, to determine the potential maximum penalty liability of the violator. The penalty which the State seeks in settlement may not exceed this statutory maximum amount.

The civil penalty figure for settlement purposes should then

be calculated based on the following formula: CIVIL PENALTY = PENALTY + ADJUSTMENTS - ECONOMIC AND LEGAL CONSIDERATIONS

PENALTY: Violations are grouped into four main penalty categories based upon the nature and severity of the violation. A penalty range is associated with each category. The following factors will be taken into account to determine where the penalty amount will fall within each range:

A. History of compliance or noncompliance. History of noncompliance includes consideration of previous violations and degree of recidivism.

B. Degree of willfulness and/or negligence. Factors to be considered include how much control the violator had over and the foreseeability of the events constituting the violation, whether the violator made or could have made reasonable efforts to prevent the violation, whether the violator knew of the legal requirements which were violated, and degree of recalcitrance.

C. Good faith efforts to comply. Good faith takes into account the openness in dealing with the violations, promptness in correction of problems, and the degree of cooperation with the State.

Category A - \$7,000 to \$10,000 per day. Violations with high impact on public health and the environment to include:

1. Discharges which result in documented public health effects and/or significant environmental damage.

2. Any type of violation not mentioned above severe enough to warrant a penalty assessment under category A.

Category B - \$2,000 to \$7,000 per day. Major violations of the Utah Water Pollution Control Act, associated regulations, permits or orders to include:

1. Discharges which likely caused or potentially would cause (undocumented) public health effects or significant environmental damage.

2. Creation of a serious hazard to public health or the environment.

3. Illegal discharges containing significant quantities or concentrations of toxic or hazardous materials.

4. Any type of violation not mentioned previously which warrants a penalty assessment under Category B.

Category C - \$500 to \$2,000 per day. Violations of the Utah Water Pollution Control Act, associated regulations, permits or orders to include:

1. Significant excursion of permit effluent limits.

2. Substantial non-compliance with the requirements of a compliance schedule.

3. Substantial non-compliance with monitoring and reporting requirements.

4. Illegal discharge containing significant quantities or concentrations of non toxic or non hazardous materials.

5. Any type of violation not mentioned previously which warrants a penalty assessment under Category C.

Category D - up to \$500 per day. Minor violations of the Utah Water Pollution Control Act, associated regulations, permits or orders to include:

1. Minor excursion of permit effluent limits.

2. Minor violations of compliance schedule requirements.

3. Minor violations of reporting requirements.

4. Illegal discharges not covered in Categories A, B and C.

5. Any type of violations not mentioned previously which warrants a penalty assessment under category D.

ADJUSTMENTS: The civil penalty shall be calculated by adding the following adjustments to the penalty amount determined above: 1) economic benefit gained as a result of non-compliance; 2) investigative costs incurred by the State and/or other governmental levels; 3) documented monetary costs associated with environmental damage.

ECONOMIC AND LEGAL CONSIDERATIONS: An adjustment downward may be made or a delayed payment schedule may be used based on a documented inability of the

violator to pay. Also, an adjustment downward may be made in consideration of the potential for protracted litigation, an attempt to ascertain the maximum penalty the court is likely to award, and/or the strength of the case.

8.4 Mitigation Projects. In some exceptional cases, it may be appropriate to allow the reduction of the penalty assessment in recognition of the violator's good faith undertaking of an environmentally beneficial mitigation project. The following criteria should be used in determining the eligibility of such projects:

A. The project must be in addition to all regulatory compliance obligations;

B. The project preferably should closely address the environmental effects of the violation;

C. The actual cost to the violator, after consideration of tax benefits, must reflect a deterrent effect;

D. The project must primarily benefit the environment rather than benefit the violator;

E. The project must be judicially enforceable;

F. The project must not generate positive public perception for violations of the law.

8.5 Intent Of Criteria/Information Requests. The criteria and procedures in this section are intended solely for the guidance of the State. They are not intended, and cannot be relied upon to create any rights, substantive or procedural, enforceable by any party in litigation with the State.

R317-1-9. Electronic Submissions and Electronic Signatures.

(a) Pursuant to the authority of Utah Code Ann. Subsection 46-4-501(a), the submission of Discharge Monitoring Reports and related information may be conducted electronically through the EPA's NetDMR program, provided the requirements of subsection (b) are met.

(b) A person may submit Discharge Monitoring Reports and related information only after (1) completion of a Subscriber Agreement in a form designated by the Director to ensure that all requirements of 40 CFR 3, EPA's Cross - Media Electronic Reporting Regulation (CROMERR) are met; and (2) completion of subsequent steps specified by EPA's CROMERR, including setting up a subscriber account.

(c) The Subscriber Agreement will continue until terminated by its own terms, until modified by mutual consent or until terminated with 60 days written notice by any party.

(d) Any person who submits a Discharge Monitoring Report or related information under the NetDMR program, and who electronically signs the report or related information, is, by providing an electronic signature, making the following certification: "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

R317-1-10. Independent Scientific Review.

10.1 Applicability.

A. Independent Scientific Review may be used to solicit formal evaluations from outside Experts on the strengths and weaknesses of the scientific basis used to support any new Division Proposal or Highly Influential Scientific Assessment (HISA).

B. Independent Peer Reviews for permits shall be limited to modifications to wasteloads used in UPDES discharge

permits, or the scientific basis of any other modification to a regulatory requirement used in developing permit limits. Review of individual permits shall follow existing adjudicative processes that govern their issuance or renewal in accordance with Subsection 19-5-105.3(1)(c)(iii).

C. The Director shall initiate an Independent Scientific Review when one of the following conditions is met:

1. A Challenging Party requests an Independent Peer Review on the scientific basis of a Division Proposal under Section 19-5-105.3 and provides the information described in Subsection R317-1-10.3.C.

2. The Director makes a determination that a new Scientific Assessment is a Highly Influential Scientific Assessment (HISA) and that sufficient resources are available to support an Independent Scientific Review.

D. Implementing an Independent Scientific Review or an Independent Peer Review does not affect any applicable public comment or public hearing requirements for any Proposal or other action considered during such a review. If a proposal or other action that is subject to a public comment or public hearing requirement is changed after a comment period has begun or hearing has been held, DEQ shall provide a new opportunity for comment or a new hearing, as appropriate. See also Subsection R317-1-10.4.D.

10.2 Independent Scientific Review process.

A. Independent Scientific Reviews shall be conducted in general accordance with the guidance contained in the United States Environmental Protection Agency's Science and Technology Policy Council Peer Review Handbook 4th Edition.

B. Independent Scientific Reviews shall entail development of a scope of work for review; selection of independent Experts; management of the Independent Scientific Reviews; submission by Experts of findings and recommendations; development of a Division response to review findings; finalization of the Proposal or HISA; and publication for public comment.

1. The Director shall prepare a scope of work that defines the objectives of an Independent Scientific Review and provide instructions for the Experts. The Director shall also prepare a schedule for the review. In the case of an Independent Peer Review the Director will seek and incorporate input from the Challenging Party into the development of the scope of work.

a. The scope of work shall include several components:

i. A summary of the Proposal or HISA under consideration and reasons for the review.

ii. The specific charge questions that articulate the issues, areas of concern, or advice sought through the Independent Scientific Review process. Charge questions shall generally focus on the degree of confidence, certainty, and major data gaps with respect to the interpretation or application of the scientific basis of a proposed rule, regulatory guidance, or regulatory tool.

iii. A compilation of data, reports or other scientific information that has a material influence on the scientific basis of the Proposal or HISA under review.

iv. A statement of qualifications and expertise required for Experts that will be considered in conducting the Independent Scientific Review.

v. Other important instructions to Experts such as reporting expectations or communication protocols.

vi. A schedule for accomplishing the review.

b. The scope of work shall be made available for public comment for a minimum of 30 days and no more than 60 days to help identify missing data or missing elements of the charge questions. In the event of a condition which poses hazard to human health or the environment that may increase significantly during a review period, a shorter period may be specified. The Director shall prepare a response to any comments that are received and shall refine the scope of work, as appropriate,

before sending the scope of work to the Experts.

2. The Director shall select Experts to conduct Independent Scientific Reviews using the following criteria:

a. Experts shall be selected who have demonstrated expertise in scientific disciplines that are relevant to the scientific basis of the Proposal or HISA.

b. Experts shall not have a conflict of interest that could jeopardize their objectivity or impartiality.

c. An Independent Scientific Review shall be conducted by at least three independent Experts. Additional Experts may be asked to conduct reviews, as needed, to fairly reflect the breadth of scientific perspectives or fields of knowledge related to the scientific basis under review. If the Independent Scientific Review is an Independent Peer Review, the conditions in Section 19-5-105.3 shall apply.

3. Management of Independent Scientific Reviews.

a. Management of Independent Scientific Reviews may be conducted by any of the following:

i. the Division;

ii. the United States Environmental Protection Agency;

iii. an independent contractor; or,

iv. an independent organization such as an editorial board of a relevant scientific journal, appropriate trade organization, or other research institute.

b. From the time they accept the invitation to participate in an Independent Scientific Review, Experts should avoid interaction with the Division, a challenging party, the general public or others that might create a real or perceived Conflict of Interest regarding the Proposal under review to ensure that Expert findings are independent and objective.

4. Compilation of Expert Findings.

a. Each Expert shall submit written comments that include responses to the charge questions and an evaluation of the scientific basis of the Proposal or HISA.

b. The Director shall charge Experts to identify in their written comments any areas of scientific uncertainty or major data gaps that have a reasonable likelihood of altering material provisions of a Proposal or HISA, including descriptions of the nature of the uncertainty, estimates of the relative extent of this uncertainty, and any recommendations for resolving areas of uncertainty.

10.3 Special provisions for Independent Peer Reviews conducted in accordance with Section 19-5-105.3.

A. On request from a Challenging Party, the Director shall conduct an Independent Peer Review of the scientific basis of a Proposal made by the Division on or after January 1, 2016, provided that the following conditions are met:

1. A Challenging Party requests the review, in writing, during the public comment period on a Proposal.

2. The Challenging Party agrees to fund the Independent Peer Review.

3. The Challenging Party provides the information described in Subsection R317-1-10.3.C.

4. The Challenging Party would be substantially impacted by the adoption of the Proposal.

B. Funding Independent Peer Reviews.

1. Costs associated with the peer reviews will be incurred by the Division and billed to the Challenging Party and may include management of the peer review process by an independent contractor agreed to by the Director and Challenging Party, honorariums provided to Experts to conduct the reviews, and expenses incurred by the Experts.

2. An estimate of projected costs for conducting an Independent Peer Review, including expenses identified in Subsection R317-1-10.3.B.1, shall be estimated by the Director and provided to the Challenging Party prior to finalization of contracts or other financial agreements with Experts.

3. If there is more than one Challenging Party to the scientific basis of a Proposal, the challenges will be

consolidated for the Independent Peer Review. Those requesting the review will be responsible for the costs of the review and allocation of costs between parties.

C. The written request for an Independent Peer Review from a Challenging Party shall be included in the final scope of work and shall include the following as best determined by the Challenging Party:

1. An explanation of the specific scientific elements of the Proposal that the Challenging Party questions and an explanation of why these elements may not be scientifically defensible.

2. If the challenge involves review of whether a Technology Based Nutrient Effluent Limit is scientifically necessary, the Challenging Party should include an explanation of why the limits are or are not necessary, including consideration of:

a. all designated beneficial uses of the receiving water and the uses of downstream, hydrologically connected water bodies;

b. current conditions and projected future conditions with respect to wastewater effluent and receiving water quantity and quality; and

c. any other nutrient sources under current and projected future conditions that it is reasonable to believe may affect the same receiving water and downstream hydrologically connected water bodies.

3. Access to sources of data, reports or other information that can be used to establish a scientific basis to the challenge that the Challenging Party would like to be included as supporting materials in the scope of work.

4. Recommendations for qualified independent Experts, who do not have a conflict of interest and whom the Challenging Party would support as Experts based on their documented expertise in areas of relevance to the technical basis of the Proposal being challenged.

D. The Independent Scientific Review process specified in Subsection R317-1-10.2 shall be followed for Independent Peer Reviews conducted at the behest of a Challenging Party with the exception of several limitations outlined in this subsection that are needed to maintain consistency with Section 19-5-105.3.

1. An Independent Peer Review panel shall consist of at least three Experts who do not have direct association with the Division or Challenging Party in accordance with Subsection 19-5-105.3(1)(b)(iii) and shall be selected by both the Division and Challenging Party as described in Subsection 19-5-105.3(5).

2. The Director shall designate one member of the Independent Peer Review Panel to serve as a chair to develop and oversee the preparation of a final synthesis report. In the event that Experts are selected through Subsection 19-5-105.3(5)(c), then the mutually agreed upon member shall serve as the Independent Peer Review Panel chair.

3. Management of the Independent Peer Review process shall be conducted by an independent contractor, who does not have a conflict of interest with the Division or the Challenging Party.

4. Management responsibilities of Independent Peer Reviews include the following:

a. Estimation of appropriate honorariums for the Experts to complete their individual written reviews with consideration for the breadth of the review identified in the scope of work and volume of supporting materials including additional compensation for the Independent Peer Review Panel chair for overseeing and writing a final written report as described in Subsection R317-1-10.3.D.5.

b. Development of a work timeline and interim progress tracking to ensure timely completion of the Independent Peer Review process.

c. Development and oversight of contracts or other financial agreements with Experts or others identified as integral to the review process.

d. Facilitation of necessary communication among the Division, Challenging Party and Experts throughout the review process, in a way that ensures all parties have access to any additional information, such as clarification to charge questions or charge questions that were not considered in development of the scope of work.

e. Regular progress updates to the Division and Challenging Party.

5. The Director shall charge the Independent Peer Review panel chair with development of a final written report, which:

a. is written by the chair after written independent reviews have been submitted by each Expert;

b. is reviewed by all members of the Independent Peer Review panel;

c. documents areas of consensus and dissent among Experts on elements of the scientific basis of the Proposal that Experts believe to have material influence of the Proposal under review;

d. provides a final recommendation from the Independent Peer Review panel on the scientific defensibility of the Division's Proposal, as specified in Subsection 19-5-105.3(7);

e. includes a determination of scientific necessity for any review that involves an evaluation of the application of a Technology Based Nutrient Effluent Limit; and

f. includes the Experts' written findings of the underlying rationale for making a determination that any element of the scientific basis of a Proposal is not scientifically defensible or is scientifically defensible with conditions, and any applicable and reasonable conditions to remedy their concerns.

E. To avoid inordinate delays in rulemaking or other regulatory decisions, Independent Peer Reviews must be completed within one year following appointment of the Independent Peer Review panel.

10.4 Use of Independent Scientific Review results.

A. The Director shall incorporate as needed recommendations and findings from the Experts in the finalization of the Proposal or HISA under review.

B. The Director shall document how the findings of the Experts were applied to the Proposal or HISA.

C. All materials associated with any review process shall be made available during the public comment period applicable to the HISA or Proposal under review, including:

1. the scope of work used to conduct the peer review;

2. the written independent findings from individual Experts;

3. summary reports that were developed after individual Expert reviews were submitted, if appropriate; and

4. the final decision of the Director and rationale for any modifications to the original agency Proposal or HISA in response to Independent Scientific Review findings and recommendations.

D. In the event that the Proposal or HISA under review does not have an established public comment process that occurs after the Independent Scientific Review Process, the Director shall make peer review material available for public comment for a minimum of 30-days and shall consider all substantive public comments prior to finalization of the Proposal or HISA.

E. The Director shall prepare a responsiveness summary that includes:

1. all substantive public comments related to the Independent Scientific Review,

2. the Director's response to public comments, and

3. any changes to the Proposal or HISA that were made in response to public comments.

F. Incorporation of the Director's decisions into existing Division processes.

1. If the Expert findings result in a decision by the Director to modify any element of any UPDES permit, this

decision will be summarized in the Statement of Basis on the next issuance of the permit and all Independent Peer Review materials shall be made available as supporting documentation when the permit is published for public comment. If the Proposal is a wasteload or other regulatory requirements for a permit the results shall be incorporated into the proposed permit on which the wasteload is based.

2. If the Proposal under review is regarding the application of a Technology Based Nutrient Effluent Limit and the Independent Peer Review panel determines that the limit is not scientifically necessary, then this finding shall be included in the Statement of Basis in the new or renewed permit as a justification for not including Technology Based Nutrient Effluent Limits that would otherwise have been required. All materials associated with the Independent Peer Review shall be made available during the public comment period for this permit as support for this determination.

3. The decision to modify any permit element, based upon the results of an Independent Scientific Review, is not final until the permit is actually issued.

4. The decision to modify a rule, based upon the results of an Independent Scientific Review, is not final until the rule is actually modified.

**KEY: water pollution, waste disposal, nutrient limits,
effluent standards**
March 27, 2017 **19-5**
Notice of Continuation August 30, 2017

R386. Health, Disease Control and Prevention, Epidemiology.**R386-703. Injury Reporting Rule.****R386-703-1. Purpose Statement.**

(1) The Injury Reporting Rule is adopted under authority of Sections 26-1-30 and 26-6-3.

(2) The Injury Reporting Rule establishes an injury surveillance and reporting system for major injuries occurring in Utah. Injuries constitute a leading cause of death and disability in Utah and, therefore, pose an important risk to public health.

(3) Rule R386-703 is adopted with the intent of identifying causes of major injury which can be reduced or eliminated, thereby reducing morbidity and mortality.

R386-703-2. Definitions.

(1) "Injury" is defined as bodily damage resulting from exposure to physical agents such as mechanical energy, thermal energy, ionizing radiation, or chemicals, or resulting from the deprivation of basic environmental requirements such as oxygen or heat. Mechanical energy injuries include acceleration and deceleration injuries, blunt trauma, and penetrating wound injuries.

(2) "Laboratory" is defined as any clinical laboratory, physician office, hospital, health clinic, reference laboratory or any facility that performs blood lead analysis.

R386-703-3. Reportable Injuries.

(3) The Utah Department of Health declares the following injuries to be of concern to the public's health. Each case shall be reported to the Utah Department of Health as described in R386-703-4.

(a) Acute traumatic brain injury. Reportable acute traumatic brain injuries include head injuries of sufficient severity to cause death or to require admission to a hospital. Acute traumatic brain injuries may be associated with transient or persistent neurological dysfunction, and may be diagnosed as brain concussions, brain contusions, or traumatic intracranial hemorrhages.

(b) Acute spinal cord injury. Reportable acute spinal cord injuries include traumatic injuries to the contents of the spinal canal, spinal cord or cauda equina, which result in death or which result in transient or persistent neurological dysfunction of sufficient severity to require hospital admission.

(c) Blunt force injury. Reportable injuries include all blunt force injuries which result in death or which are of sufficient severity to require hospital admission.

(d) Drowning and near drowning. Reportable drownings and near drownings include all water immersion injuries resulting in death and other water immersion injuries of sufficient severity to require hospital admission.

(e) Asphyxiation. Reportable asphyxiations include injuries which arise from atmospheric oxygen deprivation or from traumatic respiratory obstruction which result in death or which are of sufficient severity to require hospital admission.

(f) Burns. Reportable burn injuries include injuries resulting from acute thermal exposure or exposure to fire which result in death or which are of sufficient severity to require hospital admission.

(g) Electrocution. Reportable electrocution injuries include injuries arising from exposure to electricity which result in death or which are of sufficient severity to require hospital admission.

(h) Blood Lead. All blood lead test results are reportable. Cases of elevated blood lead levels include all persons with blood lead concentrations equal to or greater than 5 micrograms per deciliter. All cases shall be confirmed by either a venous or capillary blood sample, if the first sample was a capillary blood sample.

(i) Chemical Poisoning. Reportable cases of chemical poisoning include all persons with acute exposure to toxic chemical substances which result in death or which require hospital admission or hospital emergency department evaluation. Unintentional adverse health effects resulting from the use of pharmacological agents as prescribed by physicians do not require reporting under this rule.

(j) Intentional Injuries. Reportable intentional injuries include all cases of suicide or attempted suicide resulting in hospital admission and all cases of homicide, attempted homicide, or battery resulting in hospitalization.

(k) Injuries Related to Substance Abuse. Reportable injuries include all cases of injury resulting in death or hospitalization and associated with alcohol or drug intoxication of any person involved in the injury occurrence.

(l) Traumatic Amputations. Reportable amputations include traumatic amputations of a limb or part of a limb which result in death or which require hospital admission or hospital emergency department treatment. Only amputations resulting in bone loss shall be reported.

R386-703-4. Report Requirements.

(1) Reporting blood lead testing results.

(a) Non-Case Report Contents. Unless otherwise specified, each blood lead result shall provide at minimum the following: name, date of birth or age if date of birth is unknown, sex, zip code, and the individual or agency submitting the report.

(b) Case Report Contents. Unless otherwise specified, each injury report shall provide the following information pertaining to the injured person: name, date of birth or age if date of birth is unknown, sex, address of residence, date of injury, type of injury, external cause of injury, locale of injury, intentionality, relation of injury to occupation, disposition of the injured person, and the individual or agency submitting the report. A standard report format has been adopted and shall be supplied to reporting sources by the Department of Health upon request.

(2) Agencies or Individuals Required to Report Injuries. A reportable injury evaluated or treated at a hospital shall be reported by that hospital. Reportable injuries not evaluated at a hospital shall be reported by the involved physician, nurse, other health care practitioner, medical examiner, head start health coordinator or laboratory administrator.

(3) Time Requirements. Persons required to report shall submit their reports to the local health department or the Utah Department of Health within 60 days of the time of diagnosis or recognition of injury. In the event of an unusual or excessive occurrence of injuries which may arise from a continuing or immediate threat to the public's health, persons required to report shall immediately report by telephone to the local health officer or to the Utah Department of Health.

(4) Case Report Destinations. Each case of injury shall be reported to the Utah Department of Health or to the local health department responsible for the geographic area where the injury occurred.

(a) The local health officer shall forward all original reports to the Utah Department of Health. Local health departments may maintain copies of these reports.

(b) Except as noted in R386-703-4(4)(c), (d) and (e), case reports shall be sent to the Bureau of Epidemiology of the Utah Department of Health.

(c) In fatal cases, submission of completed death certificates to the Bureau of Vital Records fulfills reporting requirements.

(d) In cases evaluated in hospital emergency departments, submission of properly completed hospital emergency department logs to the Bureau of Emergency Medical Services will fulfill reporting requirements, provided that the records are

submitted through an electronic medium in a computer database format acceptable to the Bureau of Emergency Medical Services.

(e) In cases where reportable injuries listed in R386-703-3 are reported under the requirements of the Utah Health Data Authority Act, 26-33a, the data supplier may notify the Utah Department of Health in writing that information relating to individuals with a reportable injury will be supplied to the Bureau of Epidemiology before the identifying information is removed from the data file. Any data provided in this manner fulfills reporting requirements. If permission is not granted by the data supplier, duplicate reporting is required.

R386-703-5. Special Investigations of Injury.

(1) The Utah Department of Health and local health departments may conduct epidemiologic investigations of injury occurrence. The Utah Department of Health and local health departments may collect additional information pertaining to risk factors, medical condition, and circumstances of injury. Hospitals and other health care providers shall, upon request, provide authorized health personnel the occasion to inspect medical records of reportable injuries. The Utah Department of Transportation, Utah Industrial Commission, Utah Department of Public Safety, and local public safety agencies shall make available to authorized health personnel information on reportable injuries.

R386-703-6. Confidentiality of Reports.

(1) All reports herein required are confidential and are not open to public inspection. The confidentiality of personal information obtained under this rule shall be maintained according to the provisions of Sections 26-6-27 through 26-6-30. Nothing in this rule, however, precludes the discussion of case information with the attending physician or public health workers.

R386-703-7. Penalties.

(1) Enforcement provisions and penalties for the violation or for the enforcement of public health rules, including this Injury Reporting Rule, are prescribed under Sections 26-23-3 through 26-23-6.

KEY: rules and procedures, injuries

August 23, 2017

26-1-30

Notice of Continuation September 23, 2015

R410. Health, Health Care Financing.**R410-14. Administrative Hearing Procedures.****R410-14-1. Introduction and Authority.**

(1) This rule sets forth the administrative hearing procedures for the Division of Medicaid and Health Financing.

(2) This rule is authorized by Section 26-1-24, Section 63G-4-102, 42 U.S.C. 1396(a)(3), and 42 CFR 431, Subpart E.

R410-14-2. Definitions.

(1) The definitions in Rule R414-1 and Section 63G-4-103 apply to this rule.

(2) The following definitions also apply:

(a) "Action" means a denial, termination, suspension, or reduction of medical assistance for a recipient, or a reduction, denial or revocation of reimbursement for services for a provider; or a denial or termination of eligibility for participation in a program, or as a provider. It also means determinations by skilled nursing facilities and nursing facilities to transfer or discharge residents and adverse determinations made by a state with regard to the preadmission screening and annual resident review requirements of Section 1919(e)(7) of the Social Security Act.

(b) "Adverse determination" means a determination made in accordance with Sections 1919(b)(3)(F) or 1919(e)(7)(B) of the Social Security Act that the individual does not require the level of services provided by a nursing facility or that the individual does or does not require specialized services.

(c) "Agency" means Division of Medicaid and Health Financing (DMHF) within the Department of Health, the Department of Human Services (DHS), the Department of Workforce Services (DWS) or any managed health care organization (MCO) that has conducted or performed an action as defined in this rule.

(d) "Aggrieved person" means any recipient, enrollee, or provider who is affected by an action or inaction of an agency.

(e) "CHEC" means Child Health Evaluation and Care program, which is Utah's version of the federally mandated Early and Periodic Screening, Diagnosis and Treatment (EPSDT) Medicaid child health program.

(f) "De novo" means anew, or considering the question of a case for the first time.

(g) "DHS" means the Department of Human Services.

(h) "DOH" means the Department of Health.

(i) "DWS" means the Department of Workforce Services.

(j) "Eligibility Agency" means DWS or DHS or any entity the Agency contracts with to determine medical assistance eligibility.

(k) "Ex Parte" communications mean direct or indirect communication in connection with an issue of fact or law between the hearing officer and one party only.

(l) "Grievance" means an expression of dissatisfaction about any matter other than an action as defined in this rule. Grievances may include but are not limited to the quality of care of services provided, and aspects of interpersonal relationships such as rudeness of a provider or employee or failure to respect the rights of an enrollee of an MCO.

(m) "Grievance system" means the overall system that includes grievances and appeals handled by an MCO and access to the administrative hearing process set out in this rule.

(n) "Hearing Officer" means solely any person designated by the DMHF Director to conduct administrative hearings pursuant to this rule.

(o) "Managed Care Organization" or "MCO" means a health maintenance organization, a prepaid mental health plan or a dental managed care plan that contracts with DMHF to provide health, behavioral health or oral health services to Medicaid or CHIP recipients.

(p) "Medical record" means a record that contains medical data of a medical assistance recipient or enrollee.

(q) "Provider" means any person or entity that is licensed and otherwise authorized to furnish health care to medical assistance recipients or medical assistance MCO enrollees.

(r) "Order" means a ruling by a hearing officer that determines the legal rights, duties, privileges, immunities, or other legal interests of one or more specific persons.

(s) "Scope of service" means medical, oral or behavioral health services set out under R414 as a covered benefit.

(t) "State fair hearing" means an administrative hearing conducted pursuant to this rule.

R410-14-3. Administrative Adjudicative Procedures.

(1) Except as provided in this rule or as otherwise designated by rule or statute or converted pursuant to Subsection 63G-4-202(3), all adjudicative proceedings conducted pursuant to this rule are informal proceedings.

(2) Request for Agency Action. An aggrieved person may file a written request for agency action pursuant to Utah Code Ann. Section 63G-4-201, and in accordance with this rule.

(a) A provider may file a written request for agency action without the consent of the recipient or MCO enrollee if the request for agency action pertains to the denial of an authorization for service or a denial of payment on a claim.

(b) A provider may not file a request for agency action if the request for agency action pertains to the denial, change or termination of eligibility of a member or enrollee for a medical assistance program.

(3) If a medical issue is in dispute, each request shall include supporting medical documentation. DMHF shall schedule a hearing only when it receives sufficient medical records and may dismiss a request for agency action if it does not receive supporting medical documentation in a timely manner.

(4) Notice of Agency Action.

(a) An agency shall provide a written notice of action or adverse action to each aggrieved person. Such actions include but are not limited to:

(i) eligibility for assistance;

(ii) scope of service;

(iii) denial or limited prior authorization of a requested service including the type or level of service; and

(iv) payment of a claim.

(b) The notice must include:

(i) a statement of the action the agency intends to take;

(ii) the date the intended action becomes effective;

(iii) the reasons for the intended action;

(iv) the specific regulations that support the action, or the change in federal law, state law or DMHF policy which requires the action;

(v) the right to request a hearing;

(vi) the right to represent oneself, the right to legal counsel, or the right to use another representative at the hearing; and

(vii) if applicable, an explanation of the circumstances under which reimbursement for medical services will continue or may be reinstated pursuant to this rule.

(c) The agency shall mail the notice at least 10 calendar days before the date of the intended action except:

(i) the agency may mail the notice not later than the date of action in accordance with 42 CFR 431.213;

(ii) the agency may shorten the period of advance notice to five days before the date of action if it has facts that indicate it must take action due to probable fraud by the recipient or provider and the facts have been verified by affidavit.

R410-14-4. Hearings.

(1) DMHF shall conduct informal hearings for all issues except those specifically designated as formal hearings by this rule. The hearing officer may convert the proceeding to a

formal hearing if an aggrieved person requests a hearing that meets the criteria set forth in Section 63G-4-202.

(2) If a hearing under this rule is converted to a formal hearing pursuant to Section 63G-4-202, the formal hearing shall be conducted in accordance with these rules except as otherwise provided in Sections 63G-4-204 through 63G-4-208 or other applicable statutes.

(3) DMHF shall conduct a hearing in connection with an agency action if the Aggrieved Person requests a hearing and there is a disputed issue of fact. If there is no disputed issue of fact, the hearing officer may deny a request for an evidentiary hearing and issue a recommended decision without a hearing based on the record. In the recommended decision, the hearing officer shall specifically set out all material and relevant facts that are not in dispute.

(4) There is no disputed issue of fact if the Aggrieved Person submits facts that do not conflict with the facts that the agency relies upon in taking action or seeking relief.

(5) If the Aggrieved Person objects to the hearing denial, the person may raise that objection as grounds for relief in a request for reconsideration.

(6) An MCO may not require an Aggrieved Person to utilize arbitration or mediation in order to resolve an Action. An Aggrieved Person may file a request for hearing relating to an Action regardless of any contractual provision with an MCO which may require arbitration or mediation.

(7) The hearing officer may not grant a hearing if the issue is a state or federal law requiring an automatic change in eligibility for medical assistance or covered services that affect the Aggrieved Person.

R410-14-5. Request for Hearing.

(1) An aggrieved person shall request a hearing by submitting the request on the DMHF "Request for Hearing/Agency Action" form. The aggrieved person must then mail or fax the form to the address or fax number contained on the Notice of Agency Action or Request for Hearing Form. The request must explain why the aggrieved person is seeking agency relief.

(2) Hearings must be requested within the following deadlines:

(a) A medical assistance provider or recipient must request a hearing within 30 calendar days from the date that DMHF sends written notice of its intended action.

(b) A medical assistance recipient must request a hearing with DWS regarding eligibility for medical assistance within 90 calendar days from the date that the agency sends written notice of its intended action.

(c) A medical assistance recipient must request a hearing with DMHF regarding a determination of disability for the purposes of medical assistance eligibility within 90 calendar days from the date that DMHF sends written notice of its intended action.

(d) A medical assistance recipient must request a hearing regarding approval or denial of a scope of service within 30 calendar days from the date the agency sends written notice of its intended action.

(3) A hearing request that an aggrieved person sends via mail is deemed filed on the date of the postmark. If the postmark date is illegible, erroneous, or omitted, the request is deemed filed on the date that the agency receives it, unless the sender can demonstrate through competent evidence of the mailing date.

(4) Failure to submit a timely request for a hearing constitutes a waiver of an individual's due process rights.

(5) DMHF may dismiss a request for a hearing if the Aggrieved Person:

- (a) withdraws the request in writing;
- (b) verbally withdraws the hearing request at a prehearing

conference;

(c) fails to appear or participate in a scheduled proceeding without good cause;

(d) prolongs the hearing process without good cause;

(e) cannot be located or agency mail is returned without a forwarding address; or

(f) does not respond to any correspondence from the hearing officer or fails to provide medical records that the agency requests.

R410-14-6. Reinstatement and Continuation of Services.

(1) Continuation of Services. If the agency mails the notice of action in the time required by Section R410-14-3 and the recipient requests a hearing within 10 days of the date the notice was mailed, the agency shall continue services until a decision is rendered after the hearing unless it is determined at the hearing that the sole issue is one of federal or state law or policy and the agency promptly informs the recipient in writing that services are to be terminated or reduced pending the hearing decision.

(2) Reinstatement of Services.

(a) The agency may reinstate services if a recipient requests a hearing not more than 10 days after the date of the action. The reinstated services must continue until a hearing decision is rendered unless, at the hearing, it is determined that the sole issue is one of federal or state law or policy.

(b) The agency shall reinstate and continue services until a decision is rendered after a hearing if the agency takes action without giving 10-day notice as required by Section R410-14-3, the recipient requests a hearing not more than 10 days after the date the notice of action is mailed and action is not the result of the application of federal or state law or policy.

R410-14-7. Notice of Hearing.

(1) The agency shall notify the aggrieved person or representative in writing of the date, time and place of the hearing, and shall mail the notice at least 10 calendar days before the date of the hearing unless all parties agree to an alternative time frame. All aggrieved persons must inform the agency of a current address and telephone number.

(2) If DMHF must provide notice of a hearing, the notice becomes effective on the date of first class mailing to the party's address of record.

R410-14-8. Prehearing Procedures.

(1) DMHF shall schedule a preliminary conference, or begin negotiations in writing, within 30 calendar days from the date it receives the request for a hearing or agency action.

(2) The hearing officer may elect to conduct a preliminary conference to:

(a) formulate or simplify the issues;

(b) obtain admissions of fact and documents that will avoid unnecessary proof;

(c) arrange for the exchange of proposed exhibits or prepared expert testimony;

(d) outline procedures for the hearing; or

(e) to agree to other matters that may expedite the orderly conduct of the hearing or settlement.

(3) The hearing officer may request a review of the medical record by a DMHF CHEC/Utilization Review committee to evaluate the medical necessity of benefits or services under dispute. The committee's recommendation is not binding, but may be admitted as evidence and included in the hearing record. If a party to the proceeding objects to the committee's determination, a representative of the committee shall be made available at the hearing for examination by the hearing officer and the parties.

(4) The hearing officer may require the parties to submit a prehearing position statement setting forth the parties'

positions.

(5) The parties may enter into a written stipulation during the preliminary conference or at any time during the process.

(6) Ex parte communications with the hearing officer are prohibited. If a party attempts ex parte communication, the hearing officer shall inform the offeror that any communication that the hearing officer receives off the record, will become part of the record and furnished to all parties. Ex parte communications do not apply to communications on the status of the hearing and uncontested procedural matters.

(7) The agency shall allow the aggrieved person or a representative to examine all DMHF documents and records upon written request to DMHF at least three days before the hearing.

(8) A party may request access to protected health information in accordance with Rule 380-250, which implements the privacy rule under the Health Insurance Portability and Accountability Act of 1996 (HIPAA).

(a) The agency may request copies of pertinent records in the possession of a party and the recipient's health care providers. In the event the recipient or provider fails to produce the records within a reasonable time, DMHF may review all pertinent records in the custody of the recipient or provider during regular working hours after three days of written notice.

(b) The recipient shall submit medical records with the hearing request whenever possible. Necessary medical records include:

(i) the provision of each service and activity addressed in the hearing request;

(ii) the first and last name of the party;

(iii) the reason for performing the service or activity that includes the party's complaint or symptoms;

(iv) the recipient's medical history;

(v) examination findings;

(vi) diagnostic test results;

(vii) the goal or need that the plan of care identifies; and

(viii) the observer's assessment, clinical impression or diagnosis that includes the date of observation and identity of the observer.

(c) The medical records must demonstrate that the service is:

(i) medically necessary;

(ii) consistent with the diagnosis of the recipient's condition; and

(iii) consistent with professionally recognized standards of care.

(9) The hearing officer may require each party to file a signed prehearing disclosure form at least 10 calendar days before the scheduled hearing that identifies:

(a) fact witnesses;

(b) expert witnesses;

(c) exhibits and reports the parties intend to offer into evidence at the hearing.

(10) Each party shall supplement the disclosure form with information that becomes available after filing the original form.

R410-14-9. Form and Service of Papers.

(1) Any document that a party files with DMHF in a proceeding must:

(a) be typed or legibly written;

(b) bear a caption that clearly shows the title of the hearing;

(c) bear the docket number, if any;

(d) be dated and signed by the party or the party's authorized representative; and

(e) contain the address and telephone number of the party or the party's authorized representative.

(2) The party that files a document with DMHF shall also serve a copy of the document to all parties to the proceeding or

their representatives and file a proof of service with DMHF that consists of a certificate of service.

(3) A document may be served by mail, fax, or email address to the party's address or phone number on record with the agency.

(4) In addition to the methods set forth in this rule, a party may be served as permitted by the Utah Rules of Civil Procedure.

R410-14-10. Conduct of Hearing.

(1) The agency shall conduct hearings in accordance with Section 63G-4-203 on a de novo basis.

(2) DMHF shall appoint an impartial hearing officer to conduct hearings. Previous involvement in the initial determination of the action precludes an officer from appointment.

(3) Telephonic hearings will be held at the discretion of the hearing officer.

(4) The Department is not responsible for any travel costs incurred by the member in attending an in-person hearing.

(5) The hearing officer shall take testimony under oath or affirmation.

(6) Each party has the right to:

(a) present evidence, argue, respond, conduct cross-examination, and submit rebuttal evidence;

(b) introduce exhibits;

(c) impeach any witness regardless of which party first called the witness to testify; and

(d) rebut the evidence against the party.

(7) Each party may admit any relevant evidence and use hearsay evidence to supplement or explain other evidence as may be required for full disclosure of all facts relevant to the disposition of the hearing. Hearsay, however, is not sufficient by itself to support a finding unless admissible over objection in civil actions. The hearing officer shall give effect to the rules of privilege recognized by law and may exclude irrelevant, immaterial and unduly repetitious evidence.

(8) The hearing officer may question any party or witness.

(9) The hearing officer shall control the evidence to obtain full disclosure of the relevant facts and to safeguard the rights of the parties. The hearing officer may determine the order in which he receives the evidence.

(10) The hearing officer shall maintain order and may recess the hearing to regain order if a person engages in disrespectful, disorderly or disruptive conduct. The hearing officer may remove any person, including a participant from the hearing, to maintain order. If a person shows persistent disregard for order and procedure, the hearing officer may:

(a) restrict the person's participation in the hearing;

(b) strike pleadings or evidence; or

(c) issue an order of default.

(11) If a party desires to employ a court reporter to make a record of the hearing, it must file an original transcript of the hearing with the hearing officer at no cost to the agency.

(12) The party who initiates the hearing process through a request for agency action has the burden of proof as the moving party.

(13) When a party possesses but fails to introduce certain evidence, the hearing officer may infer that the evidence does not support the party's position.

R410-14-11. Witnesses and Subpoenas.

(1) A party shall arrange for a witness to be present at a hearing.

(2) A hearing officer may on his own or at the request of a party, order a witness excluded so that they cannot hear another witness' testimony.

(3) The hearing officer may issue a subpoena to compel the attendance of a witness or the production of evidence upon

written request by a party that demonstrates a sufficient need.

(4) The hearing officer may issue a subpoena on his own motion.

(5) A party may file an affidavit that requests the hearing officer to subpoena a witness to produce books, papers, correspondence, memoranda, or other records. The affidavit must include:

(a) the name and address of the person or entity upon whom the subpoena is to be served;

(b) a description of the documents, papers, books, accounts, letters, photographs, objects, or other tangible items that the applicant seeks;

(c) material that is relevant to the issue of the hearing; and

(d) a statement by the applicant that to the best of his knowledge, the witness possesses or controls the requested material.

(6) A party shall arrange to serve any subpoena that the hearing officer issues on its behalf, and shall serve a copy of the affidavit that it presents to the hearing officer.

(7) Except for employees of an agency, a witness that the hearing officer subpoenas to attend a hearing is entitled to appropriate fees and mileage. The witness shall file a written demand for fees with the hearing officer within 10 calendar days from the date that he appears at the hearing.

(8) The hearing officer may issue an order of default against any party that fails to obey an order entered by the hearing officer.

R410-14-12. Record.

(1) The hearing officer shall make a complete record of all hearings. A hearing record is the sole property of DMHF and DMHF shall maintain the complete record in a secure area.

(2) Proceedings other than hearings may be recorded at the discretion of the hearing officer.

(3) If a party requests a copy of the recording of a hearing, that party may transcribe the recording at the party's sole cost.

(4) DMHF or its designated agent shall retain recordings of all hearings for a period of one year.

(5) DMHF shall retain written records of all hearings for a period of 10 years pending further litigation.

R410-14-13. Continuances or Further Hearings.

(1) The hearing officer, on the officer's own motion or at the request of a party showing good cause, may:

(a) continue the hearing to another time or place; or

(b) order a further hearing.

(2) If the hearing officer determines that additional evidence is necessary for the proper determination of the case, the officer may:

(a) continue the hearing to a later date and order the parties to produce additional evidence; or

(b) close the hearing and hold the record open to receive additional documentary evidence.

(3) The hearing officer shall provide to all parties any evidence that he receives and each party has the opportunity to rebut that evidence.

(4) The hearing officer shall provide written notice of the time and place of a continued or further hearing, except when the officer orders a continuance during a hearing and all parties receive oral notice.

R410-14-14. Proposed Decision and Final Agency Review.

(1) At the conclusion of the hearing, the hearing officer shall take the matter under advisement and submit a recommended decision to the DMHF Director or the director's designee. The recommended decision is based on the testimony and evidence entered at the hearing, Medicaid policy and procedure, and legal precedent.

(2) The recommended decision must contain findings of

fact and conclusions of law.

(3) The DMHF Director or the director's designee may:

(a) adopt the recommended decision or any portion of the decision;

(b) reject the recommended decision or any portion of the decision, and make an independent determination based upon the record; or

(c) remand the matter to the hearing officer to take additional evidence, and the hearing officer thereafter shall submit to the DMHF director or the director's designee a new recommended decision.

(4) The director or designee's decision constitutes final administrative action and is subject to judicial review.

(5) DMHF shall send a copy of the final administrative action to each party or representative and notify them of their right to judicial review.

(6) The parties shall comply with a final decision from the director reversing the agency's decision within 10 calendar days.

(7) The DOH Executive Director shall review all recommended decisions to determine approval of medical assistance for an organ transplant. The Executive Director's decision constitutes final administrative action and is subject to judicial review.

R410-14-15. Amending Administrative Orders.

(1) DMHF may amend an order if the hearing officer determines that the order contains a clerical error.

(2) DMHF shall notify the parties of its intent to amend the order by serving a notice of agency action signed by the hearing officer.

(3) The DMHF Director shall review the amended order and he or his designee shall issue a final agency amended order.

(4) DMHF shall provide a copy of the final amended order to the respondent and the petitioner.

R410-14-16. Agency Review.

A party to the proceeding may move for reconsideration of DMHF's final administrative action in accordance with Sections 63G-4-301 through 63G-4-302. A person may seek review of a DWS final agency order concerning eligibility for medical assistance by filing a written request for review with DMHF in accordance with Section 63G-4-301.

R410-14-17. Judicial Review.

A party to the proceeding may obtain judicial review in accordance with Section 63G-4-102 and Sections 63G-4-401 through 63G-4-405.

R410-14-18. Declaratory Orders.

(1) DMHF may issue declaratory orders in accordance with Rule R380-1.

(2) If DMHF does not issue a declaratory order within 60 days after receipt of the request, the petition is denied.

(3) DMHF shall retain the request for declaratory ruling in its records.

(4) DMHF may not issue a declaratory order if an adjudicative proceeding that involves the same parties and issue is pending before the agency or a federal or state court.

R410-14-19. Interpreters.

(1) If a party notifies DMHF that it needs an interpreter, DMHF shall arrange for an interpreter at no cost to the party.

(2) The party may arrange for an interpreter to be present at the hearing only if the hearing officer can verify that the interpreter is at least 18 years of age, and fluent in English and the language of the person who testifies.

(3) The hearing officer shall instruct the interpreter to interpret word for word, and not to summarize, add, change, or delete any of the testimony or questions.

(4) The interpreter must swear under oath to truthfully and accurately translate all statements, questions and answers.

R410-14-20. MCO Grievance and Appeal System.

(1) For the purpose of this section, the following definitions apply:

(a) "Action" means one of the following actions by an MCO:

(i) The denial or limited authorization of a requested service, including the type and level of services;

(ii) The reduction, suspension, or termination of a previously authorized service;

(iii) The denial, in whole or in part, of payment for a service;

(iv) The failure to provide services in a timely manner;

(v) The failure to act within the time frames provided in 42 CFR 438.408(b);

(vi) The denial of a Medicaid enrollee's request to exercise his or her right under 42 CFR 438.52(b)(2)(ii) to obtain services outside of the network; or

(vii) The restriction of a Medicaid enrollee that utilize services at a frequency or amount that are not medically necessary, in accordance with state utilization guidelines.

(b) "Appeal" means a request for the MCO review of an "action" as defined in this section or a request for DMHF to review a final decision rendered by an MCO as a result of the MCO's appeal process.

(c) "Party" means the agency, or other person commencing an adjudicative proceeding, all respondents, and any MCO who is or may be obligated to pay a claim or provide a benefit or service to a recipient.

(2) An MCO shall establish a grievance system in accordance with this rule, 42 CFR 431.200 et seq. and 438.400 et seq. and the MCO's contractual obligations entered into with DMHF.

(3) The MCO grievance system shall include a written internal grievance procedure for aggrieved person to challenge the approval for payment or denial of payment for medical services.

(4) The MCO shall provide to its enrollees and providers written information that explains the grievance and appeal procedure including a right to request a state fair hearing in accordance with this rule.

(5) The MCO's notice of action shall comply with the requirements set out in Section R410-14-3.

(6) The MCO's written notice of final decision shall include an explanation of the aggrieved person's right to a state fair hearing pursuant to this rule.

(7) State fair hearings.

(a) Unless otherwise stated in this section, an aggrieved party may appeal an MCO final written disposition on an action by requesting a state fair hearing in accordance with this rule. The hearing request must include a copy of the final written notice of the MCO disposition.

(b) An aggrieved person must exhaust the MCO grievance procedure before an enrollee or provider may request a state fair hearing. The hearing request must include a copy of the final written notice of the MCO decision.

(c) The aggrieved party must also request a hearing within 30 days from the date of the MCO final written notice of the decision.

(d) Multiple MCO Participation in a state fair hearing.

(i) If an appeal is based on a dispute regarding the payment liability between two or more MCOs, the aggrieved person is not required to exhaust the MCO grievance procedure for each MCO before requesting a state fair hearing under this rule.

(ii) If DMHF identifies an MCO that may be liable to pay the claim and did not participate in the underlying grievance procedure, it shall send notice to that MCO that it may be

subject to liability and its right to participate in the state fair hearing.

(iii) If more than one MCO is party to the state fair hearing, DMHF shall provide a notice to all parties that shall include the identity of all parties, the reason for the dispute, a copy of the hearing request and a statement that the MCO that did not participate in the underlying grievance procedure may be subject to payment liability and its right to participate in the state fair hearing.

(e) DMHF may, but is not required to, file an answer or other response or position statement in the hearing proceeding at any time so long as it gives notice to all other parties no less than five days before the hearing. If DMHF chooses not to file a response or position statement, it does not waive its right to participate in the hearing.

R410-14-21. Pre-admission Screening Resident Review (PASRR) Hearings.

Pursuant to 42 U.S.C. 1396r, any resident and potential resident of a nursing facility whether Medicaid eligible or not, who disagrees with the preadmission screening and appropriateness of a placement decision that DMHF or its designated agent makes, has the right to an informal hearing upon request in accordance with this rule and the requirements set out in 42 CFR 483.200, Subpart D.

R410-14-22. Nurse Aid Registry Hearings.

Pursuant to 42 U.S.C. 1395i-3, each nurse aide is subject to investigation of allegations of resident abuse, neglect or misappropriation of resident property. DMHF or its designated agent shall investigate each complaint and the nurse aide is entitled to a hearing that DMHF or its designated agent conducts before a substantiated claim can be entered into the registry.

R410-14-23. Skilled Nursing Facility (SNF), Intermediate Care Facility (ICF) and Intermediate Care Facility for Persons with Intellectual Disabilities (ICF/ID) Hearings.

Pursuant to 42 CFR 431, Subpart D, DMHF shall provide an appeals hearing procedure for Skilled Nursing Facility (SNF), Intermediate Care Facility (ICF) or Intermediate Care Facility for Persons with Intellectual Disabilities (ICF/ID). The informal hearing shall be conducted pursuant to this rule and the requirements of 42 CFR 431.153 and 431.154.

R410-14-24. Home and Community-Based Waiver Hearings.

(1) Hearings conducted by DMHF. Pursuant to 42 CFR 431, Subpart E, DMHF shall provide an appeals hearing procedure for home and community-based waiver hearings. The informal hearing shall be conducted pursuant to this rule and the requirements of 42 CFR 431.200 through 431.250.

(2) Hearings conducted by the Division of Services for People with Disabilities (DSPD).

(a) For home and community-based waivers in which DSPD is the designated operating agency and the grievance is based on whether the person meets the eligibility criteria for state matching funds through DHS in accordance with Title 62A, Chapter 5a, the eligibility determination of the operating agency is final.

(b) If DSPD determines that an individual does not meet the eligibility criteria for state matching funds through DHS, it shall inform the individual in writing and provide the individual an opportunity to appeal the decision through the DHS hearing process in accordance with Section R539-3-8.

(c) The DSPD decision is dispositive for purposes of this subsection. DMHF shall sustain the determination and there is no right to further agency review.

R410-14-25. Restriction Program Hearings.

Pursuant to 42 CFR 431.54(e), the Department may restrict Medicaid recipients who utilize services at a frequency or amount that are not medically necessary, in accordance with state utilization guidelines. DMHF shall give the recipient notice and opportunity for an informal hearing pursuant to this section before imposing restrictions.

R410-14-26. Eligibility Hearings.

(1) The eligibility agency shall provide a fair hearing process for applicants and recipients in accordance with the requirements of 42 CFR 431.220 through 431.246. The eligibility agency shall comply with Title 63G, Chapter 4.

(2) An applicant or recipient must request a hearing in writing or orally at the agency that made the final eligibility decision. A request for a hearing concerning a Medicaid eligibility decision must be made within 90 calendar days of the date of the notice of agency action with which the applicant or recipient disagrees. The request need only include a statement that the applicant or recipient wants to present his case.

(3) Hearings are conducted only at the request of a client or spouse, a minor client's parent, or a guardian or representative of the client.

(4) A recipient who requests a fair hearing concerning a decision about Medicaid eligibility shall receive continued medical assistance benefits pending a hearing decision if the recipient requests a hearing before the effective date of the action or within 15 calendar days of the date on the notice of agency action.

(5) The recipient must repay the continued benefits that he receives pending the hearing decision if the hearing decision upholds the agency action.

(a) A recipient may decline the continued benefits that the Department offers pending a hearing decision by notifying the eligibility agency.

(b) Benefits that the recipient must repay include premiums for Medicare or other health insurance, premiums and fees to managed care and contracted mental health services entities, fee-for-service benefits on behalf of the individual, and medical travel fees or reimbursement to or on behalf of the individual.

(6) The eligibility agency must receive a request for a hearing by the close of business on a business day that is before or on the due date. If the due date is a non-business day, the eligibility agency must receive the request by the close of business on the next business day.

(7) DWS conducts fair hearings for all medical assistance cases except those concerning eligibility for advanced premium tax credits made by the FFM, foster care or subsidized adoption Medicaid. The Department conducts hearings for foster care or subsidized adoption Medicaid cases. In addition, the Department conducts hearings concerning its disability determination decisions. The FFM conducts hearings concerning determinations for advanced premium tax credits.

(8) DWS conducts informal, evidentiary hearings in accordance with Sections R986-100-124 through R986-100-134, except for the provisions in Subsection R986-100-128(17) and Subsection R986-100-134(5). Instead, the provisions in Subsection R414-301-7(16) concerning the time frame to comply with the DWS decision, and Subsection R414-301-7(17)(c) concerning continued assistance during a superior agency review conducted by the Department apply respectively.

(9) The Department conducts informal hearings concerning eligibility for foster care or subsidized adoption Medicaid in accordance with Rule R414-1. Pursuant to Section 63G-4-402, within 30 days of the date the Department issues the hearing decision, the applicant or recipient may file a petition for judicial review with the district court.

(10) DWS may not conduct a hearing contesting resource assessment until an institutionalized individual has applied for

Medicaid.

(11) An applicant or recipient may designate a person or professional organization to assist in the hearing or act as his representative. An applicant or recipient may have a friend or family member attend the hearing for assistance.

(12) The applicant, recipient or representative can arrange to review case information before the scheduled hearing.

(13) At least one employee from the eligibility agency must attend the hearing. Other employees of the eligibility agency, other state agencies and legal representatives for the eligibility agency may attend as needed.

(14) The DWS Division of Adjudication and Appeals shall mail a written hearing decision to the parties involved in the hearing. The decision shall include the decision, a summary of the facts and the policies or regulations supporting the decision.

(a) The DWS decision shall include information about the right to request a superior agency review from the Department and how to make that request.

(b) The applicant or recipient may appeal the DWS decision to the Department pursuant to Section R410-14-16. The request for agency review must be made in writing and delivered to either DWS or the Department within 30 days of the mailing date of the decision.

(15) The Department, as the single state Medicaid agency, is a party to all fair hearings concerning eligibility for medical assistance programs. The Department conducts appeals and has the right to conduct a superior agency review of medical assistance hearing decisions rendered by DWS.

(16) The DWS hearing decision becomes final 30 days after the decision is sent unless the Department conducts a superior agency review. The DWS hearing decision may be made final in less than 30 days upon agreement of all parties.

(17) The Department conducts a superior agency review when the applicant or recipient appeals the DWS decision or upon its own accord if it disagrees with the DWS decision.

(a) The Department notifies DWS whenever it conducts a superior agency review.

(b) The DWS hearing decision is suspended until the Department issues a final decision and order on agency review.

(c) A recipient receiving continued benefits continues to be eligible for continued benefits pending the superior agency review decision.

(18) The superior agency review is an informal proceeding and shall be conducted in accordance with Section 63G-4-301.

(19) A Department decision and order on agency review becomes final upon issuance.

(20) The eligibility agency takes case action within 10 calendar days of the date the decision becomes final.

(21) Pursuant to Section 63G-4-402, within 30 days of the date the decision and order on agency review is issued, the applicant or recipient may file a petition for judicial review with the district court. Failure to appeal a DWS hearing decision to the Department negates this right to a judicial appeal.

(22) Recipients are not entitled to continued benefits pending judicial review by the district court.

KEY: Medicaid

February 10, 2016

Notice of Continuation August 14, 2017

26-1-24

26-1-5

63G-4-102

R414. Health, Health Care Financing, Coverage and Reimbursement Policy.

R414-2B. Inpatient Intensive Physical Rehabilitation Services.

R414-2B-1. Introduction.

Inpatient intensive physical rehabilitation services are provided for Medicaid recipients in accordance with the Hospital Services Utah Medicaid Provider Manual and Attachment 4.19-A of the Medicaid State Plan, as incorporated into Section R414-1-5.

KEY: Medicaid

April 1, 2016

Notice of Continuation August 29, 2017

26-1-5

26-18-3(2)

R414. Health, Health Care Financing, Coverage and Reimbursement Policy.**R414-29. Client Review/Education and Restriction Policy.****R414-29-1. Introduction and Authority.**

(1) The Client Restriction Program promotes the appropriate use of quality medical services by identifying and correcting overutilization of services.

(2) This rule is required by 42 CFR 431.54(e) and 456.3.

R414-29-2. Definitions.

In addition to the definitions in R414-1, the following definitions apply to this rule:

(1) "Overutilize" means use of medical services at a frequency or amount that is above what is medically necessary.

(2) "Restriction Case Manager" means a Medical Doctor or Doctor of Osteopathy who agrees to become the primary medical care provider for all of a restricted client's non-emergency medical needs.

(3) "Restriction Pharmacy" means the only pharmacy that can receive Medicaid reimbursement for dispensing non-emergency pharmacy items to a restricted client.

R414-29-3. Notifying Clients of Overutilization of Services.

(1) The Department may require a client to participate in the Restriction Program based on the client's overutilization of services. The Department shall notify the client in writing of its determination. This notice shall:

(a) state the factors, or combination of factors, justifying Restriction Program participation;

(b) cite the regulation authorizing Restriction Program participation;

(c) invite the client to provide additional information justifying the use of services, within ten calendar days after the date the notice is issued;

(d) notify the client that, if he fails to submit additional written justification within ten calendar days after the date the notice is issued, the Department shall require his participation in the Restriction Program.

(e) invite the client to select a Restriction Case Manager and a Restriction Pharmacy;

(f) inform the client that if he fails to contact the Department with a choice within ten calendar days after the date the notice is issued, the Department shall assign a Restriction Case Manager and a Restriction Pharmacy without further notice.

(2) If the client submits additional information within ten calendar days after the notice is issued, the Department shall evaluate this information along with the original data, and notify the client in writing of the Department's determination.

(3) If the client disagrees with the determination, he may request a hearing. The Department shall provide the client with instructions on how to request a hearing, including a hearing request form.

R414-29-4. Restriction Case Manager.

The client may select a physician as a Restriction Case Manager if the physician agrees to serve in that capacity and if the Department accepts the physician as a Restriction Case Manager. The Restriction Case Manager must develop a written treatment plan the client understands and accepts.

R414-29-5. Restriction Pharmacy.

The client may select a pharmacy as a Restriction Pharmacy if the pharmacy agrees to serve in that capacity and if the Department accepts the pharmacy as a Restriction Pharmacy.

R414-29-6. Changes in Restriction Case Manager or Restriction Pharmacy.

(1) When a client requests a change in the Restriction Case

Manager or the Restriction Pharmacy, the request may be verbal or written. Before placing the new Restriction Case Manager on the client's case record, the Department must verify that the proposed Restriction Case Manager agrees to the responsibilities of the Restriction Case Manager.

(2) The Department must approve all changes in the Restriction Case Manager or the Restriction Pharmacy before the client may use a different Restriction Case Manager or Restriction Pharmacy. Circumstances under which the Department may approve such a change are:

(a) client, Restriction Case Manager, or Restriction Pharmacy moves location;

(b) Restriction Case Manager or Restriction Pharmacy discontinues or limits practice;

(c) Restriction Case Manager, or Restriction Pharmacy requests a change;

(d) Department Staff Physician recommends a change, when a periodic assessment of the use of services reveals indications of possible overutilization by the restricted client, the Restriction Case Manager, or both.

(3) The Department may mandate a change in the Restriction Case Manager or Restriction Pharmacy whenever it determines that the client:

(a) continues to overutilize services despite being under restriction; or

(b) is not receiving appropriate care while being managed by the Restriction provider.

R414-29-7. Length of Restriction.

(1) A client shall continue participation in the Restriction Program until the client has demonstrated he is not overutilizing services. Once a client is placed in the Restriction Program, a client may request a review for discharge from the Restriction Program after one year. If utilization data supports discharge from the Restriction Program, the client will no longer be enrolled in the program.

(2) If a client loses Medicaid eligibility, and subsequently re-establishes Medicaid eligibility, the Department shall automatically require the client's participation in the Restriction Program if the loss of eligibility is for less than one year.

(3) The Department shall assess the client's utilization of services when requested after Restriction has been maintained for at least one year and shall use information such as:

(a) medical care obtained from multiple practitioners;

(b) prescriptions obtained from multiple practitioners;

(c) emergency rooms used for non-emergency services as defined in the Utah Medicaid Table of Authorized Emergency Diagnosis;

(d) use of multiple emergency rooms;

(e) concurrent use of medications in the same therapeutic class, when prescribed by different practitioners;

(f) indications of forged or altered prescriptions;

(g) use of medical services inconsistent with diagnosis;

(h) other patterns indicating overutilization.

KEY: Medicaid**May 16, 2013****Notice of Continuation August 22, 2017****26-1-5**

R414. Health, Health Care Financing, Coverage and Reimbursement Policy.

R414-70. Medical Supplies, Durable Medical Equipment, and Prosthetic Devices.

R414-70-1. Introduction and Authority.

(1) This rule governs the provision of medical supplies, durable medical equipment (DME), and prosthetic device services.

(2) This rule is authorized by Sections 26-18-3 and 26-1-5.

(3) As required by Section 26-18-2.3, the Department provides these services in an efficient, economical manner, safeguarding against unnecessary, unreasonable, or inappropriate use of these services.

R414-70-2. Definitions.

As used in this rule:

(1) "Durable medical equipment" or "DME" means equipment that:

- (a) can withstand repeated use;
- (b) is primarily and customarily used to serve a medical purpose; and
- (c) generally is not useful to a person in the absence of an illness or injury.

(2) "Entitled to nursing facility services" means an individual who:

- (a) is in a nursing facility and whose nursing facility stay is covered by Medicaid; or
- (b) is receiving services in a waiver program for individuals who require nursing facility level of care.

(3) "Individual eligible for optional services" means an individual who is not entitled to nursing facility services.

(4) "Individual entitled to mandatory services" means an individual who is entitled to nursing facility services.

(5) "Medical supplies" means items for medical use that are disposable or semi-disposable and are non-reusable.

(6) "Medical Supplies and Durable Medical Equipment Manual" means services described in the Utah Medicaid Provider Manual, Section 2, Medical Supplies and Durable Medical Equipment, as incorporated in Section R414-1-5.

(7) "Prosthetic device" means replacement, corrective, or supportive devices such as braces, orthoses, or prosthetic limbs prescribed by a physician or other licensed practitioner of the healing arts within the scope of his or her practice as defined by state law to:

- (a) artificially replace a missing portion of the body;
 - (b) prevent or correct physical deformities or malfunction;
- or
- (c) support a weak or deformed portion of the body.

R414-70-3. Services.

(1) Medical supplies, DME, and prosthetic devices are optional services.

(2) Medical supplies, DME, and prosthetic devices are limited to services described in the Medical Supplies and Durable Medical Equipment Manual.

(3) The Medical Supplies and Durable Medical Equipment Manual specifies the reasonable and appropriate amount, duration, and scope of the service sufficient to reasonably achieve its purpose.

(4) Medical supplies, DME, and prosthetic devices may be provided to an individual only as part of a written plan that is reviewed at least annually by a physician.

(5) The home health agency must meet the face-to-face requirement, as stated in Section R414-1-30, or the Department may deny or recover reimbursement.

R414-70-4. Services for Individuals Eligible for Optional Services.

(1) An individual eligible for optional services may receive

medical supplies, DME, and prosthetic devices as described in the Medical Supplies and Durable Medical Equipment Manual.

(2) An individual eligible for optional services must meet the criteria established in the Medical Supplies and Durable Medical Equipment Manual and obtain prior approval if required.

R414-70-5. Services for Individuals Eligible for Mandatory Services.

(1) An individual entitled to mandatory services may receive medical supplies, DME, and prosthetic devices as described in the Medical Supplies and Durable Medical Equipment Manual.

(2) An individual eligible for mandatory services must meet the criteria established in the Medical Supplies and Durable Medical Equipment Manual and obtain prior approval if required.

(3) An individual entitled to mandatory services may request an agency review to seek medical supplies and DME not listed in the Medical Supplies and Durable Medical Equipment Manual.

R414-70-6. Services for Individuals Residing in Long Term Care Facilities.

(1) The Department provides medical supplies, DME, and prosthetic devices to individuals residing in a nursing care facility or an ICF/MR as part of the per diem payment.

(2) An individual residing in a nursing care facility or ICF/MR may receive additional medical supplies, DME, and prosthetic devices only as specifically indicated in the Medical Supplies and Durable Medical Equipment Manual.

(3) An individual residing in a nursing care facility or an ICF/MR may request an agency review to seek medical supplies and DME not listed in the Medical Supplies and Durable Medical Equipment Manual.

R414-70-7. Less Costly Alternative.

The Department may provide at its discretion services not described in the Medical Supplies and Durable Medical Equipment Manual as provided in Section R414-1-6.

R414-70-8. Reimbursement.

Medical supplies, DME, and prosthetic devices are reimbursed using the fee schedule in Attachment 4.19-B of the Medicaid State Plan and incorporated by reference in Section R414-1-5.

KEY: Medicaid, medical supplies, durable medical equipment, prosthetics

July 1, 2017 26-1-5
Notice of Continuation August 22, 2017 26-18-2.3
26-18-3

R477. Human Resource Management, Administration.**R477-1. Definitions.****R477-1-1. Definitions.**

The following definitions apply throughout these rules unless otherwise indicated within the text of each rule.

(1) Abandonment of Position: An act of resignation resulting when an employee is absent from work for three consecutive working days without approval.

(2) Actual FTE: The total number of full time equivalents based on actual hours paid in the state payroll system.

(3) Actual Hours Worked: Time spent performing duties and responsibilities associated with the employee's job assignments.

(4) Actual Wage: The employee's assigned wage rate in the central personnel record maintained by the Department of Human Resource Management.

(5) Administrative Leave: Leave with pay granted to an employee at management discretion that is not charged against the employee's leave accounts.

(6) Administrative Adjustment: An adjustment to a salary range approved by DHRM that is not a Market Comparability Adjustment, a Structure Adjustment, or a Reclassification. It is for administrative purposes only. An Administrative Adjustment will result in an increase to incumbent pay only when necessary to bring salaries to the minimum of the salary range.

(7) Administrative Salary Decrease: A decrease in the current actual wage based on non-disciplinary administrative reasons determined by an agency head.

(8) Administrative Salary Increase: An increase in the current actual wage based on special circumstances determined by an agency head.

(9) Agency: An entity of state government that is:

(a) directed by an executive director, elected official or commissioner defined in Title 67, Chapter 22 or in other sections of the code;

(b) authorized to employ personnel; and

(c) subject to Title 67, Chapter 19, Utah State Personnel Management Act.

(10) Agency Head: The executive director or commissioner of each agency or a designated appointee.

(11) Agency Human Resource Field Office: An office of the Department of Human Resource Management located at another agency's facility.

(12) Agency Management: The agency head and all other officers or employees who have responsibility and authority to establish, implement, and manage agency policies and programs.

(13) Alternative State Application Program (ASAP): A program designed to appoint a qualified person with a disability through an on the job examination period.

(14) Appeal: A formal request to a higher level for reconsideration of a grievance decision.

(15) Appointing Authority: The officer, board, commission, person or group of persons authorized to make appointments in their agencies.

(16) Break in Service: A point at which an individual has an official separation date and is no longer employed by the State of Utah.

(17) Budgeted FTE: The total number of full time equivalents budgeted by the Legislature and approved by the Governor.

(18) Bumping: A procedure that may be applied prior to a reduction in force action (RIF). It allows employees with higher retention points to bump other employees with lower retention points as identified in the work force adjustment plan, as long as employees meet the eligibility criteria outlined in interchangeability of skills.

(19) Career Mobility: A temporary assignment of an employee to a different position for purposes of professional

growth or fulfillment of specific organizational needs.

(20) Career Service Employee: An employee who has successfully completed a probationary period in a career service position.

(21) Career Service Exempt Employee: An employee appointed to work for a period of time, serving at the pleasure of the appointing authority, who may be separated from state employment at any time without just cause.

(22) Career Service Exempt Position: A position in state service exempted by law from provisions of career service under Section 67-19-15.

(23) Career Service Status: Status granted to employees who successfully complete a probationary period for career service positions.

(24) Category of Work: A job series within an agency designated by the agency head as having positions to be eliminated agency wide through a reduction in force. Category of work may be further reduced as follows:

(a) a unit smaller than the agency upon providing justification and rationale for approval, including:

(i) unit number;

(ii) cost centers;

(iii) geographic locations;

(iv) agency programs.

(b) positions identified by a set of essential functions, including:

(i) position analysis data;

(ii) certificates;

(iii) licenses;

(iv) special qualifications;

(v) degrees that are required or directly related to the position.

(25) Change of Workload: A change in position responsibilities and duties or a need to eliminate or create particular positions in an agency caused by legislative action, financial circumstances, or administrative reorganization.

(26) Classification Grievance: The approved procedure by which an agency or a career service employee may grieve a formal classification decision regarding the classification of a position.

(27) Classified Service: Positions that are subject to the classification and compensation provisions stipulated in Section 67-19-12.

(28) Classification Study: A Classification review conducted by DHRM under Section R477-3-4. A study may include single or multiple job or position reviews.

(29) Compensatory Time: Time off that is provided to an employee in lieu of monetary overtime compensation.

(30) Contractor: An individual who is contracted for service, is not supervised by a state supervisor, but is responsible for providing a specified service for a designated fee within a specified time. The contractor shall be responsible for paying all taxes and FICA payments, and may not accrue benefits.

(31) Critical Incident Drug or Alcohol Test: A drug or alcohol test conducted on an employee as a result of the behavior, action, or inaction of an employee that is of such seriousness it requires an immediate intervention on the part of management.

(32) Demotion: A disciplinary action resulting in a reduction of an employee's current actual wage.

(33) Detailed Position Record Management Report: A document that lists an agency's authorized positions, incumbent's name and hourly rate, job identification number, salary range, and schedule.

(34) DHRM: The Department of Human Resource Management.

(35) DHRM Approved Recruitment and Selection System: The state's recruitment and selection system, which is a

centralized and automated computer system administered by the Department of Human Resource Management.

(36) Direct Supervisor: An employee's primary supervisor who normally directs day to day job activity such as assigning work, approving time records, and considering leave requests.

(37) Disability: Disability shall have the same definition found in the Americans With Disabilities Act (ADA) of 1990, 42 USC 12101 (2008); Equal Employment Opportunity Commission regulation, 29 CFR 1630 (2008); including exclusions and modifications.

(38) Disciplinary Action: Action taken by management under Rule R477-11.

(39) Dismissal: A separation from state employment for cause under Section R477-11-2.

(40) Dual State Employment: Employees who work for more than one agency and meet the employee criteria which is located in the Division of Finance accounting policy 11-18.00.

(41) Drug-Free Workplace Act: A 1988 congressional act, 34 CFR 84 (2008), requiring a drug-free workplace certification by state agencies that receive federal grants or contracts.

(42) Employee Personnel Files: For purposes of Title 67, Chapters 18 and 19, the files or records maintained by DHRM and agencies as required by Section R477-2-5. This does not include employee information maintained by supervisors.

(43) Employment Eligibility Verification: A requirement of the Immigration Reform and Control Act of 1986, 8 USC 1324 (1988) that employers verify the identity and eligibility of individuals for employment in the United States.

(44) "Escalator" Principle: Under the Uniformed Services Employment and Reemployment Rights Act (USERRA), returning veterans are entitled to return back onto their seniority escalator at the point they would have occupied had they not left state employment.

(45) Excess Hours: A category of compensable hours separate and apart from compensatory or overtime hours that accrue at straight time only when an employee's actual hours worked, plus additional hours paid, exceed an employee's normal work period.

(46) Employee's Family Member: An employee's Spouse, siblings, step-siblings, siblings-in-law, parents, step-parents, parents-in-law, children, step-children, children-in-law, and any person living in the same household as the employee.

(47) Fitness For Duty Evaluation: Evaluation, assessment or study by a licensed professional to determine if an individual is able to meet the performance or conduct standards required by the position held, or is a direct threat to the safety of self or others.

(48) FLSA Exempt: Employees who are exempt from the overtime and minimum wage provisions of the Fair Labor Standards Act.

(49) FLSA Nonexempt: Employees who are not exempt from the overtime and minimum wage provisions of the Fair Labor Standards Act.

(50) Follow Up Drug or Alcohol Test: Unannounced drug or alcohol tests conducted for up to five years on an employee who has previously tested positive or who has successfully completed a voluntary or required substance abuse treatment program.

(51) Furlough: A temporary leave of absence from duty without pay for budgetary reasons or lack of work.

(52) GOMB: Governor's Office of Management and Budget.

(53) Grievance: A career service employee's claim or charge of the existence of injustice or oppression, including dismissal from employment resulting from an act, occurrence, omission, condition, discriminatory practice or unfair employment practice not including position classification or schedule assignment, or a complaint by a reporting employee as defined in Section 67-19a-101(4)(c).

(54) Grievance Procedures: The statutory process of grievances and appeals as set forth in Sections 67-19a-101 through 67-19a-406 and the rules promulgated by the Career Service Review Office.

(55) Gross Compensation: Employee's total earnings, taxable and nontaxable, as shown on the employee's pay statement.

(56) Highly Sensitive Position: A position approved by DHRM that includes the performance of:

- (a) safety sensitive functions:
 - (i) requiring an employee to operate a commercial motor vehicle under 49 CFR 383 (January 18, 2006);
 - (ii) directly related to law enforcement;
 - (iii) involving direct access or having control over direct access to controlled substances;
 - (iv) directly impacting the safety or welfare of the general public;
 - (v) requiring an employee to carry or have access to firearms; or
- (b) data sensitive functions permitting or requiring an employee to access an individual's highly sensitive, personally identifiable, private information, including:
 - (i) financial assets, liabilities, and account information;
 - (ii) social security numbers;
 - (iii) wage information;
 - (iv) medical history;
 - (v) public assistance benefits; or
 - (vi) driver license

(57) Hiring List: A list of qualified and interested applicants who are eligible to be considered for appointment or conditional appointment to a specific position created in the DHRM approved recruitment and selection system.

(58) HRE: Human Resource Enterprise; the state human resource management information system.

(59) Incompetence: Inadequacy or unsuitability in performance of assigned duties and responsibilities.

(60) Inefficiency: Wastefulness of government resources including time, energy, money, or staff resources or failure to maintain the required level of performance.

(61) Interchangeability of Skills: Employees are considered to have interchangeable skills only for those positions they have previously held successfully in Utah state government executive branch employment or for those positions which they have successfully supervised and for which they satisfy job requirements.

(62) Intern: An individual in a college degree or certification program assigned to work in an activity where on-the-job training or community service experience is accepted.

(63) Job: A group of positions similar in duties performed, in degree of supervision exercised or required, in requirements of training, experience, or skill and other characteristics. The same salary range is applied to each position in the group.

(64) Job Description: A document containing the duties, distinguishing characteristics, knowledge, skills, and other requirements for a job.

(65) Job Family: A group of jobs that have related or common work content, that require common skills, qualifications, licenses, etc., and that normally represents a general occupation area.

(66) Job Requirements: Skill requirements defined at the job level.

(67) Job Series: Two or more jobs in the same functional area having the same job title, but distinguished and defined by increasingly difficult levels of skills, responsibilities, knowledge and requirements; or two or more jobs with different titles working in the same functional area that have licensure, certification or other requirements with increasingly difficult levels of skills, responsibilities, knowledge and requirements.

(68) Leave Benefit: A benefit provided to an employee that includes: Annual leave, sick leave, converted sick leave, and holiday leave. These benefits are not provided to non-benefited employees.

(69) Legislative Salary Adjustment: A legislatively approved salary increase for a specific category of employees based on criteria determined by the Legislature.

(70) Malfeasance: Intentional wrongdoing, deliberate violation of law or standard, or mismanagement of responsibilities.

(71) Market Based Bonus: One time lump sum monies given to a new hire or a current employee to encourage employment with the state.

(72) Market Comparability Adjustment: An adjustment to a salary range approved by the legislature that is based upon salary data and other relevant information from comparable jobs in the market that is collected by DHRM or from DHRM approved justifiable sources. The Market Comparability Adjustment may also change incumbent pay resulting in a budgetary impact for an agency.

(73) Merit Increase: A legislatively approved and funded salary increase for employees to recognize and reward successful performance.

(74) Misconduct: Wrongful, improper, unacceptable, or unlawful conduct or behavior that is inconsistent with prevailing agency practices or the best interest of the agency.

(75) Misfeasance: The improper or unlawful performance of an act that is lawful or proper.

(76) Nonfeasance: Failure to perform either an official duty or legal requirement.

(77) Pay for Performance Award: A type of cash incentive award where an employee or group of employees may receive a cash award for meeting or exceeding well-defined annual production or performance standards, targets and measurements.

(78) Pay for Performance: A plan for incentivizing employees for meeting or exceeding production or performance goals, in which the plan is well-defined before work begins, eligible work groups are defined, specific goals and targets are determined, measurement procedures are in place, and specific incentives are provided when goals and targets are met.

(79) Performance Evaluation: A formal, periodic evaluation of an employee's work performance.

(80) Performance Improvement Plan: A documented administrative action to address substandard performance of an employee under Section R477-10-2.

(81) Performance Management: The ongoing process of communication between the supervisor and the employee which defines work standards and expectations, and assesses performance leading to a formal annual performance evaluation.

(82) Performance Plan: A written summary of the standards and expectations required for the successful performance of each job duty or task. These standards normally include completion dates and qualitative and quantitative levels of performance expectations.

(83) Performance Standard: Specific, measurable, observable and attainable objectives that represent the level of performance to which an employee and supervisor are committed during an evaluation period.

(84) Personnel Adjudicatory Proceedings: The informal appeals procedure contained in Section 63G-4-101 et seq. for all human resource policies and practices not covered by the state employees grievance procedure promulgated by the Career Service Review Office, or the classification appeals procedure.

(85) Phased Retirement: Employment on a half-time basis of a retiree with the same participating employer immediately following the retiree's retirement date. During phased retirement retiree will receive a reduced retirement allowance.

(86) Position: A unique set of duties and responsibilities identified by DHRM authorized job and position management

numbers.

(87) Position Description: A document that describes the detailed tasks performed, as well as the knowledge, skills, abilities, and other requirements of a specific position.

(88) Position Identification Number: A unique number assigned to a position for FTE management.

(89) Post Accident Drug or Alcohol Test: A Drug or alcohol test conducted on an employee who is involved in a vehicle accident while on duty or driving a state vehicle:

(a) where a fatality occurs;

(b) where there is sufficient information to conclude that the employee was a contributing cause to an accident that results in bodily injury or property damage; or

(c) where there is reasonable suspicion that the employee had been driving while under the influence of alcohol or a controlled substance.

(90) Preemployment Drug Test: A drug test conducted on:

(a) final applicants who are not current employees;

(b) final candidates for a highly sensitive position;

(c) employees who are final candidates for transfer or promotion from a non-highly sensitive position to a highly sensitive position; or

(d) employees who transfer or are promoted from one highly sensitive position to another highly sensitive position.

(91) Probationary Employee: An employee hired into a career service position who has not completed the required probationary period for that position.

(92) Probationary Period: A period of time considered part of the selection process, identified at the job level, the purpose of which is to allow management to evaluate an employee's ability to perform assigned duties and responsibilities and to determine if career service status should be granted.

(93) Proficiency: An employee's overall quality of work, productivity, skills demonstrated through work performance and other factors that relate to employee performance or conduct.

(94) Promotion: An action moving an employee from a position in one job to a position in another job having a higher salary range maximum.

(95) Protected Activity: Opposition to discrimination or participation in proceedings covered by the antidiscrimination statutes or the Utah State Grievance and Appeal Procedure. Harassment based on protected activity can constitute unlawful retaliation.

(96) Random Drug or Alcohol Test: Unannounced drug or alcohol testing of a sample of highly sensitive employees done in accordance with federal regulations or state rules, policies, and procedures, and conducted in a manner such that each highly sensitive employee has an equal chance of being selected for testing.

(97) Reappointment: Return to work of an individual from the reappointment register after separation from employment.

(98) Reappointment Register: A register of individuals who have prior to March 2, 2009:

(a) held career service status and been separated in a reduction in force;

(b) held career service status and accepted career service exempt positions without a break in service and were not retained, unless discharged for cause; or

(c) by Career Service Review Board decision been placed on the reappointment register.

(99) Reasonable Suspicion Drug or Alcohol Test: A drug or alcohol test conducted on an employee based on specific, contemporaneous, articulated observations concerning the appearance, behavior, speech or body odors of the employee.

(100) Reassignment: An action mandated by management moving an employee from one job or position to a different job or position with an equal or lesser salary range maximum for

administrative reasons. A reassignment may not include a decrease in actual wage except as provided in federal or state law.

(101) Reclassification: A DHRM reallocation of a single position or multiple positions from one job to another job to reflect management initiated changes in duties and responsibilities.

(102) Reduction in Force: (RIF) Abolishment of positions resulting in the termination of career service staff. RIFs can occur due to inadequate funds, a change of workload, or a lack of work.

(103) Reemployment: Return to work of an employee who resigned or took military leave of absence from state employment to serve in the uniformed services covered under USERRA.

(104) Requisition: An electronic document used for HRE Online recruitment, selection and tracking purposes that includes specific information for a particular position, job seekers' applications, and a hiring list.

(105) Salary Range: Established minimum and maximum rates assigned to a job.

(106) Schedule: The determination of whether a position meets criteria stipulated in the Utah Code Annotated to be career service (schedule B) or career service exempt (schedule A).

(107) Separation: An employee's voluntary or involuntary departure from state employment.

(108) Settling Period: A sufficient amount of time, determined by agency management, for an employee to fully assume new or higher level duties required of a position.

(109) Structure Adjustment: An adjustment to a salary range approved by DHRM that is based upon salary data and other relevant information from comparable jobs in the market that is collected by DHRM or from DHRM approved justifiable sources. The salary range adjustment cannot have a budgetary impact on an agency unless additional approval is received from the Governor's Office.

(110) Tangible Employment Action: A significant change in employment status, such as firing, demotion, failure to promote, work reassignment, or a decision which changes benefits.

(111) Transfer: An action not mandated by management moving an employee from one job or position to another job or position with an equal or lesser salary range maximum for which the employee qualifies. A transfer may include a decrease in actual wage.

(112) Uniformed Services: The United States Army, Navy, Marine Corps, Air Force, Coast Guard; Reserve units of the Army, Navy, Marine Corps, Air Force, or Coast Guard; Army National Guard or Air National Guard; Commissioned Corps of Public Health Service, National Oceanic and Atmospheric Administration (NOAA), National Disaster Medical Systems (NDMS) and any other category of persons designated by the President in time of war or emergency. Service in Uniformed Services includes: voluntary or involuntary duty, including active duty; active duty for training; initial active duty for training; inactive duty training; full-time National Guard duty; or absence from work for an examination to determine fitness for any of the above types of duty.

(113) Unlawful Discrimination: An action against an employee or applicant based on race, religion, national origin, color, sex, age, disability, pregnancy, sexual orientation, gender identity, protected activity under the anti-discrimination statutes, political affiliation, military status or affiliation, or any other factor, as prohibited by law.

(114) USERRA: Uniformed Services Employment and Reemployment Rights Act of 1994 (P.L. 103-353), requires state governments to re-employ eligible veterans who resigned or took a military leave of absence from state employment to serve in the uniformed services and who return to work within

a specified time period after military discharge.

(115) Veteran: An individual who has served on active duty in the armed forces for more than 180 consecutive days, or was a member of a reserve component who served in a campaign or expedition for which a campaign medal has been authorized. Individuals must have been separated or retired under honorable conditions.

(116) Veteran Employment Opportunity Program (VEOP): A program designed to appoint a qualified veteran through an on the job examination period.

(117) Volunteer: Any person who donates services to the state or its subdivisions without pay or other compensation except actual and reasonable expenses incurred, as approved by the supervising agency.

(118) Wage: The fixed hourly rate paid to an employee.

(119) Work Period: The maximum number of hours an employee may work prior to accruing overtime or compensatory hours based on variable payroll cycles outlined in 67-19-6.7 and 29 CFR 553.230.

KEY: personnel management, rules and procedures, definitions

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R477. Human Resource Management, Administration.**R477-2. Administration.****R477-2-1. Rules Applicability.**

These rules apply to the executive branch of Utah State Government and its career service and career service exempt employees. Other entities may be covered in specific sections as determined by statute. Any inclusions or exceptions to these rules are specifically noted in applicable sections. Entities which are not bound by mandatory compliance with these rules include:

- (1) members of the Legislature and legislative employees;
- (2) members of the judiciary and judicial employees;
- (3) officers, faculty, and other employees of state institutions of higher education;
- (4) officers, faculty, and other employees of the public education system, other than those directly employed by the State Board of Education;
- (5) employees of the Office of the Attorney General;
- (6) elected members of the executive branch and their Schedule A employees;
- (7) employees of independent entities, quasi-governmental agencies and special service districts;
- (8) employees in any position that is determined by statute to be exempt from these rules.

R477-2-2. Compliance Responsibility.

Agencies shall comply with these rules.

- (1) The Executive Director, DHRM, may authorize exceptions to these rules where allowed when:
 - (a) applying the rule prevents the achievement of legitimate government objectives; or
 - (b) applying the rule infringes on the legal rights of an employee.
- (2) Agency personnel records, practices, policies and procedures, employment and actions, shall comply with these rules and are subject to compliance audits by DHRM.

R477-2-3. Fair Employment Practice and Discrimination.

All state personnel actions shall provide equal employment opportunity for all individuals.

- (1) Employment actions including appointment, tenure or term, condition or privilege of employment shall be based on the ability to perform the essential duties, functions, and responsibilities assigned to a particular position.
- (2) Employment actions may not be based on race, religion, national origin, color, sex, age, disability, pregnancy, sexual orientation, gender identity, or protected activity under the anti-discrimination statutes, political affiliation, military status or affiliation or any other non-job related factor, except as provided under Subsection 67-19-15(2)(b)(ii).
- (3) An employee who alleges unlawful discrimination may:
 - (a) submit a complaint to the agency head; and
 - (b) file a charge with the Utah Labor Commission Antidiscrimination and Labor Division within 180 days of the alleged harm, or directly with the EEOC within 300 days of the alleged harm.
- (4) A state official may not impede any employee from the timely filing of a discrimination complaint in accordance with state and federal requirements.

R477-2-4. Control of Personal Service Expenditures.

- (1) Statewide control of personal service expenditures shall be the shared responsibility of the employing agency, the Governor's Office of Management and Budget, the Department of Human Resource Management and the Division of Finance.
- (2) Changes in job identification numbers, salary ranges, or number of positions listed in the Detailed Position Record Management Report shall be approved by the Executive

Director, DHRM or designee.

- (3) No person shall be placed or retained on an agency payroll unless that person occupies a position listed in an agency's approved Detailed Position Record Management Report.

R477-2-5. Records.

Access to and privacy of personnel records maintained by DHRM are governed by Title 63G, Chapter 2, the Government Records Access and Management Act (GRAMA) and applicable federal laws. DHRM shall designate and classify the records and record series it maintains under the GRAMA statute and respond to GRAMA requests for employee records.

(1) DHRM shall maintain an electronic record for each employee that contains the following, as appropriate:

- (a) Social Security number, date of birth, home address, and private phone number.

(i) This information is classified as private under GRAMA.

(ii) DHRM may grant agency access to this information for state business purposes. Agencies shall maintain the privacy of this information.

- (b) performance ratings;
- (c) records of actions affecting employee salary history, classification history, title and salary range, employment status and other personal data.

(2) DHRM shall maintain, on behalf of agencies, personnel files.

(3) DHRM shall maintain, on behalf of agencies, a confidential medical file. Confidentiality shall be maintained in accordance with applicable regulations. Information in the medical file is private, controlled, or exempt in accordance with Title 63G-2.

(4) An employee has the right to review the employee's personnel file, upon request, in the presence of a DHRM representative.

(a) An employee may request corrections, amendments to, or challenge any information in the DHRM electronic or hard copy personnel file, through the following process:

(i) The employee shall request in writing to the appropriate agency human resource field office that changes occur.

(ii) The employing agency shall be given an opportunity to respond.

(iii) Disputes over information that are not resolved between the employing agency and the employee shall be decided in writing by the Executive Director, DHRM. DHRM shall maintain a record of the employee's letter, the agency's response, and the DHRM Executive Director's decision.

(5) When a disciplinary action is rescinded or disapproved upon appeal, forms, documents and records pertaining to the case shall be removed from the personnel file.

(a) When the record in question is on microfilm, a seal will be placed on the record and a suitable notice placed on the carton or envelope. This notice shall indicate the limits of the sealed Title and the authority for the action.

(6) Upon employee separation, DHRM shall retain electronic records for thirty years. Agency hard copy records shall be retained at the agency for a minimum of two years, and then transferred to the State Record Center to be retained according to the record retention schedule.

(7) When an employee transfers from one agency to another, the former agency shall transfer the employee's personnel file, medical and I-9 records to the new agency.

(8) An employee who violates confidentiality is subject to disciplinary action and may be personally liable.

(9) Records related to conduct for which an employee may be disciplined under R477-11-1(1) are classified as private records under Subsection 62G-2-302(2)(a).

- (i) If disciplinary action under R477-11-1(4) has been

sustained and completed and all time for appeal has been exhausted, the documents issued in the disciplinary process are classified as public records under Subsection 63G-2-301(3)(o).

R477-2-6. Release of Information in a Reference Inquiry.

Reference checks or inquiries made regarding current or former public employees, volunteers, independent contractors, and members of advisory boards or commissions can be released if the information is classified as public, or if the subject of the record has signed and provided a current reference release form for information authorized under Title 63G, Chapter 2, of the Government Records Access and Management Act.

(1) The employment record is the property of Utah State Government with all rights reserved to utilize, disseminate or dispose of in accordance with the Government Records Access and Management Act.

(2) Additional information may be provided if authorized by law.

R477-2-7. Employment Eligibility Verification (Immigration Reform and Control Act -- 1986).

Employees newly hired, rehired, or placed through reciprocity with or assimilation from another career service jurisdiction shall provide verifiable documentation of their identity and eligibility for employment in the United States by completing all sections of the Employment Eligibility Verification Form I-9 as required under the Immigration Reform and Control Act of 1986.

R477-2-8. Public Officers Supervising a Relative.

A public officer may not appoint, directly supervise, or make salary, performance, disciplinary, or other employment matter decisions regarding a family member.

(1) A public officer supervising a family member shall make a complete written disclosure of any such relationship to the agency head and be recused from any and all employment matter discussions or decisions relating to the family member.

R477-2-9. Employee Liability.

An employee who becomes aware of any occurrence which may give rise to a lawsuit, who receives notice of claim, or is sued because of an incident related to state employment, shall give immediate notice to his supervisor and to the Department of Administrative Services, Division of Risk Management.

(1) In most cases, under Title 63G, Chapter 7, the Governmental Immunity Act, an employee shall receive defense and indemnification unless the case involves fraud, malice or the use of alcohol or drugs by the employee.

(2) Before an agency may defend its employee against a claim, the employee shall make a written request for a defense to the agency head within ten calendar days, under Subsection 63G-7-902(2).

R477-2-10. Alternative Dispute Resolution.

Agency management may establish a voluntary alternative dispute resolution program under Chapter 63G, Chapter 5.

KEY: administrative responsibility, confidentiality of information, fair employment practices, public information
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R477. Human Resource Management, Administration.**R477-8. Working Conditions.****R477-8-1. Work Week.**

(1) The state's standard work week begins Saturday at 12:00am and ends the following Friday at 11:59pm. FLSA nonexempt employees may not deviate from this work week.

(2) State offices are typically open Monday through Friday from 8 a.m. to 5 p.m. Agencies may adopt alternative business hours under Section 67-25-201.

(3) Agency management shall establish work schedules and may approve a flexible starting and ending time for an employee as long as scheduling is consistent with overtime provisions of Section R477-8-4.

(4) An employee is required to work the assigned schedule and be at work on time. An employee who is late, regardless of the reason including inclement weather, shall, with management approval, make up the lost time by using accrued leave, leave without pay or adjusting their work schedule.

(5) An employee's time worked shall be calculated in increments of 15 minutes. This rule incorporates by reference 29 CFR 785.48 (2012) for rounding practices when calculating time worked.

R477-8-2. Telecommuting.

(1) Telecommuting is an agency option, not a universal employee benefit. Agencies utilizing a telecommuting program shall:

(a) establish a written policy governing telecommuting;

(b) enter into a written contract with each participating employee to specify conditions, such as use of state or personal equipment, protecting confidential information, and results such as identifiable benefits to the state and how customer needs are being met;

(c) not allow participating employees to violate overtime rules;

(d) not compensate for normal commute time; and

(e) document telecommuting authorization in the Utah Performance Management system.

R477-8-3. Lunch, Break and Exercise Release Periods.

(1) Each full time work day may include a minimum of 30 minutes non-compensated lunch period, at the discretion of agency management.

(a) Lunch periods may not be used to shorten a work day.

(2) An employee may take a 15 minute compensated break period for every four hours worked.

(a) Break periods may not be accumulated to accommodate a shorter work day or longer lunch period.

(3) Compensated exercise release time may be allowed at agency discretion for up to three days per week for 30 minutes.

(a) Participating agencies shall have a written policy regarding exercise release time.

(b) Work time exercise that is a bona fide job requirement is not subject to this section.

(4) Authorization for exercise time and regular scheduled lunch breaks less than 30 minutes shall be documented in the Utah Performance Management system.

(5) As requested and after consultation with an employee, reasonable, daily break periods shall be granted for the first year following the birth of a child to allow an employee to express breast milk for her child.

(a) A private location, other than a restroom, shall be provided.

(b) Appropriate temporary storage shall be provided for expressed milk.

R477-8-4. Overtime Standards.

The state's policy for overtime is adopted and incorporated from the Fair Labor Standards Act, 29 CFR Parts 500 to

899(2002) and Section 67-19-6.7.

(1) Management may direct an employee to work overtime. Each agency shall develop internal rules and procedures to ensure overtime usage is efficient and economical. These policies and procedures shall include:

(a) prior supervisory approval for all overtime worked;

(b) recordkeeping guidelines for all overtime worked;

(c) verification that there are sufficient funds in the budget to compensate for overtime worked.

(2) Overtime compensation designations are identified for each job title in HRE as either FLSA nonexempt, or FLSA exempt.

(a) An employee may appeal the FLSA designation to the agency human resource field office. Further appeals may be filed directly with the United States Department of Labor, Wage and Hour Division. Sections 67-19-31, 67-19a-301 and Title 63G, Chapter 4 may not be applied for FLSA appeals purposes.

(3) An FLSA nonexempt employee may not work more than 40 hours a week without management approval. Overtime shall accrue when the employee actually works more than 40 hours a week. Leave and holiday time taken within the work period may not be counted as hours worked when calculating overtime accrual. Hours worked over two or more weeks may not be averaged with the exception of certain types of law enforcement, fire protection, and correctional employees.

(4) Agency management shall arrange for an employee's use of compensatory time as soon as possible without unduly disrupting agency operations or endangering public health, safety or property.

R477-8-5. Compensatory Time for FLSA Nonexempt Employees.

(1) An FLSA nonexempt employee shall sign a prior overtime agreement authorizing management to compensate the employee for overtime worked by actual payment or accrual of compensatory time at time and one half.

(a) An FLSA nonexempt employee may receive compensatory time for overtime up to a maximum of 80 hours. Only with prior approval of the Executive Director, DHRM, may compensatory time accrue up to 240 hours for regular employees or up to 480 hours for peace or correctional officers, emergency or seasonal employees. Once an employee reaches the maximum, additional overtime shall be paid on the payday for the period in which it was earned.

(b) Compensatory time balances for an FLSA nonexempt employee shall be paid down to zero at the rate of pay in the old position in the same pay period that the employee is:

(i) transferred from one agency to a different agency; or

(ii) promoted, reclassified, reassigned or transferred to an FLSA exempt position.

R477-8-6. Compensatory Time for FLSA Exempt Employees.

(1) An FLSA exempt employee may not work more than 80 hours in a pay period without management approval. Compensatory time shall accrue when the employee actually works more than 80 hours in a work period. Leave and holiday time taken within the work period may not count as hours worked when calculating compensatory time. Each agency shall compensate an FLSA exempt employee who works overtime by granting time off. For each hour of overtime worked, an FLSA exempt employee shall accrue an hour of compensatory time.

(a) Agencies shall establish in written policy a uniform overtime year either for the agency as a whole or by unit number and communicate it to employees. Overtime years shall be set at one of the following pay periods: Five, Ten, Fifteen, Twenty, or the last pay period of the calendar year. If an agency fails to establish a uniform overtime year, the Executive Director, DHRM, and the Director of Finance, Department of

Administrative Services, will establish the date for the agency at the last pay period of the calendar year. An agency may change the established overtime year only after the current overtime year has lapsed, unless justifiable reasons exist and the Executive Director, DHRM, has granted a written exception.

(b) The limit on compensatory time accrued by an FLSA exempt employee may not be less than 80 hours.

(i) Any compensatory time earned by an FLSA exempt employee over the limit shall be paid out in the pay period it is earned.

(c) Any compensatory time earned by an FLSA exempt employee is not an entitlement, a benefit, nor a vested right.

(d) Any compensatory time earned by an FLSA exempt employee shall lapse upon occurrence of any one of the following events:

(i) at the end of the employee's established overtime year;

(ii) upon assignment to another agency;

(iii) changes FLSA status to nonexempt; or

(iv) when an employee terminates, retires, or otherwise does not return to work before the end of the overtime year.

(e) Schedule AB employees may not be compensated for compensatory time except with time off.

R477-8-7. Nonexempt Public Safety Personnel.

(1) To be considered for overtime compensation under this rule, a law enforcement or correctional officer shall meet the following criteria:

(a) be a uniformed or plain clothes sworn officer;

(b) be empowered by statute or local ordinance to enforce laws designed to maintain public peace and order, to protect life and property from accidental or willful injury, and to prevent and detect crimes;

(c) have the power to arrest;

(d) be POST certified or scheduled for POST training; and

(e) perform over 80% law enforcement duties.

(2) Agencies shall select one of the following maximum work hour thresholds to determine when overtime compensation is granted to law enforcement or correctional officers designated FLSA nonexempt and covered under this rule.

(a) 171 hours in a work period of 28 consecutive days; or

(b) 86 hours in a work period of 14 consecutive days.

(3) Agencies shall select one of the following maximum work hour thresholds to determine when overtime compensation is granted to fire protection employees.

(a) 212 hours in a work period of 28 consecutive days; or

(b) 106 hours in a work period of 14 consecutive days.

(4) Agencies may designate a lesser threshold in a 14 day or 28 day consecutive work period as long as it conforms to the following:

(a) the Fair Labor Standards Act, Section 207(k);

(b) 29 CFR 553.230;

(c) the state's payroll period; and

(d) the approval of the Executive Director, DHRM.

R477-8-8. Time Reporting.

(1) Employees shall complete and submit a state approved biweekly time record that accurately reflects the hours actually worked, including:

(a) approved and unapproved overtime;

(b) on-call time;

(c) stand-by time;

(d) meal periods of public safety and correctional officers who are on duty more than 24 consecutive hours; and

(e) approved leave time.

(2) An employee who fails to accurately record time may be disciplined.

(3) Time records developed by the agency shall have the same elements of the state approved time record and be approved by the Department of Administrative Services,

Division of Finance.

(4) A Supervisor who directs an employee to submit an inaccurate time record or knowingly approves an inaccurate time record may be disciplined.

(5) A Non-exempt employee who believes FLSA rights have been violated may submit a complaint directly to the Executive Director, DHRM or designee.

R477-8-9. Hours Worked.

(1) An FLSA nonexempt employee shall be compensated for all hours worked. An employee who works unauthorized overtime may be disciplined.

(a) All time that an FLSA nonexempt employee is required to wait for an assignment while on duty, before reporting to duty, or before performing activities is counted towards hours worked.

(b) Time spent waiting after being relieved from duty is not counted as hours worked if one or more of the following conditions apply:

(i) the employee arrives voluntarily before their scheduled shift and waits before starting duties;

(ii) the employee is completely relieved from duty and allowed to leave the job;

(iii) the employee is relieved until a definite specified time; or

(iv) the relief period is long enough for the employee to use as the employee sees fit.

R477-8-10. On-call Time.

(1) An FLSA nonexempt employee required by agency management to be available for on-call work shall be compensated for on-call time at a rate of one hour for every 12 hours the employee is on-call. A FLSA exempt employee required by agency management to be available for on-call work may be compensated at agency discretion, not to exceed a rate of one hour for every 12 hours the employee is on-call.

(a) Time is considered on-call time when the employee has freedom of movement in personal matters as long as the employee is available for a call to duty. An employee may not be in on-call status while using leave or while otherwise unable to respond to a call to duty.

(b) Agencies who enter into on-call agreements with employees shall have an agency policy consistent with this rule and finance policy.

(c) On-call status shall be designated by a supervisor and shall be in writing and documented in the Utah Performance Management system on an annual basis. Carrying a pager or cell phone shall not constitute on-call time without this written agreement.

(d) The employee shall record the hours spent in on-call status, and any actual hours worked, on the official time record, for the specific date the hours were incurred, in order to be paid.

(e) An employee may not record on-call hours and actual hours worked for the same period of time. On-call hours, actual hours worked, and leave hours cannot exceed 24 hours in a day.

(f) An employee shall round on-call hours to the nearest two decimal places. Hours of on-call pay shall be calculated by subtracting the number of hours worked in the on-call period from the number of hours in the on-call period then dividing the result by 12.

R477-8-11. Stand-by Time.

(1) An employee restricted to stand-by at a specified location ready for work shall be paid full-time or overtime, as appropriate. An employee shall be paid for stand-by time if required to stand by the post ready for duty, even during lunch periods, equipment breakdowns, or other temporary work shutdowns.

(2) The meal periods of police, and other public safety or

correctional officers and firefighters who are on duty more than 24 consecutive hours shall be counted as working time, unless an express agreement excludes the time.

R477-8-12. Commuting and Travel Time.

- (1) Normal commuting time from home to work and back may not count towards hours worked.
- (2) Time an employee spends traveling from one job site to another during the normal work schedule shall count towards hours worked.
- (3) Time an employee spends traveling on a special one day assignment shall count towards hours worked except meal time and ordinary home to work travel.
- (4) Travel that keeps an employee away from home overnight does not count towards hours worked if it is time spent outside of regular working hours as a passenger on an airplane, train, boat, bus, or automobile.
- (5) Travel as a passenger counts toward hours worked if it is time spent during regular working hours. This applies to nonworking days, as well as regular working days. However, regular meal period time is not counted.

R477-8-13. Excess Hours.

- (1) An employee may use excess hours the same way as annual leave.
 - (a) An employee may not work hours which would lead to the accrual of excess hours without prior management approval.
 - (b) An employee may not use any leave time, other than holiday and jury leave, that results in the accrual of excess hours.
 - (c) An employee may not accumulate more than 80 excess hours.
 - (d) Agency management shall pay out excess hours:
 - (i) for all hours accrued above the limit set by DHRM;
 - (ii) when an employee is assigned from one agency to another; and
 - (iii) upon separation.
 - (e) Agency management may pay out excess hours:
 - (i) automatically in the same pay period accrued;
 - (ii) at any time during the year as determined appropriate by a state agency or division; or
 - (iii) upon request of the employee and approval by the agency head.

R477-8-14. Dual State Employment.

An employee who has more than one position within state government, regardless of schedule is considered to be in a dual employment situation. The following conditions apply to dual employment status.

- (1) An employee may work in up to four different positions in state government.
- (2) An employee's benefit status for any secondary position(s), regardless of schedule of any of the positions, shall be the same as the primary position.
- (3) An employee's FLSA status (exempt or nonexempt) for any secondary position(s) shall be the same as the primary position.
- (4) Leave accrual shall be based on all hours worked in all positions and may not exceed the maximum amount allowed in the primary position.
- (5) As a condition of dual employment, an employee in dual employment status is prohibited from accruing excess hours in either the primary or secondary positions. All excess hours earned shall be paid at straight time in the pay period in which the excess hours are earned.
- (6) As a condition of dual employment, the Overtime or Comp selection shall be as overtime paid regardless of FLSA status. An employee may not accrue comp hours while in dual employment status.

(7) Overtime shall be calculated at straight time or time and one half depending on the FLSA status of the primary position. Time and a half overtime rates shall be calculated based on the weighted average rate of the multiple positions. Refer to Division of Finance's payroll policies, dual employment section.

(8) The Accepting Terms of Dual Employment form shall be completed, signed by the employee and supervisor, and placed in the employee's personnel file with a copy sent to the Division of Finance.

(9) Secondary positions may not interfere with the efficient performance of the employee's primary position or create a conflict of interest. An employee in dual employment status shall comply with conditions under Subsection R477-9-2(1).

R477-8-15. Reasonable Accommodation.

Employees and applicants seeking reasonable accommodation shall be evaluated under state and federal law. This shall be done in conjunction with the agency ADA coordinator. The ADA coordinator shall consult with the Division of Risk management prior to denying any accommodation request.

R477-8-16. Fitness For Duty Evaluations.

Fitness for duty medical evaluations may be performed under any of the following circumstances:

- (1) return to work from injury or illness except as prohibited by federal law;
- (2) when management determines that there is a direct threat to the health or safety of self or others;
- (3) in conjunction with corrective action, performance or conduct issues, or discipline; or
- (4) when a fitness for duty evaluation is a bona fide occupational qualification for selection, retention, or promotion.

R477-8-17. Temporary Transitional Assignment.

(1) Agency management may place an employee in a temporary transitional assignment when an employee is unable to perform essential job functions due to temporary health restrictions. Time spent on such an assignment may be counted as leave for purposes of R477-7-1(9).

(2) Temporary transitional assignments may also be part of any of the following:

- (a) when management determines that there is a direct threat to the health or safety of self or others;
- (b) in conjunction with an internal investigation, corrective action, performance or conduct issues, or discipline;
- (c) where there is a bona fide occupational qualification for retention in a position;
- (d) while an employee is being evaluated to determine if reasonable accommodation is appropriate.

R477-8-18. Change in Work Location.

(1) An involuntary change in work location shall not be permitted if this requires the employee to commute or relocate 50 miles or more, one way, beyond the current one way commute, unless:

- (a) the change in work location is communicated to the employee at employment; or
- (b) the agency either pays to move the employee consistent with Section R25-6-8 and Finance Policy FIACCT 05-03.03, or reimburses commuting expenses up to the cost of a move.

R477-8-19. Agency Policies and Exemptions.

(1) Each agency may write its own policies for work schedules, overtime, leave usage, and other working conditions consistent with these rules.

R477-8-20. Background Checks.

In order to protect the citizens of the State of Utah and state resources and with the approval of the agency head, agencies may establish background check policies requiring specific employees to submit to a criminal background check through the Department of Public Safety, Bureau of Criminal Identification.

(1) Agencies who have statewide responsibility for confidential information, sensitive financial information, or handle state funds may require employees to submit to a background check, including employees who work in other state agencies.

(2) The cost of the background check will be the responsibility of the employing agency.

R477-8-21. Policy Exceptions.

The Executive Director, DHRM, may authorize exceptions to this rule, consistent with Subsection R477-2-2(1).

KEY: breaks, telecommuting, overtime, dual employment**August 30, 2017****67-19-6****Notice of Continuation April 27, 2017****67-19-6.7****20A-3-103**

R510. Human Services, Aging and Adult Services.**R510-302. Adult Protective Services.****R510-302-1. Purpose.**

This rule clarifies the responsibilities of Adult Protective Services.

R510-302-2. Authority.

This rule is authorized by Section 62A-3-302.

R510-302-3. Principles.

(1) Adult Protective Services shall respect the lifestyle that is knowingly and voluntarily chosen by the vulnerable adult.

(2) A vulnerable adult with capacity to consent has the right to self-determination.

(3) All services provided are voluntary unless court ordered.

(4) All services provided should be the least restrictive possible.

(5) All services provided shall be community-based unless community-based services are unavailable.

(6) Adult Protective Services shall encourage a vulnerable adult's family and community to take responsibility for providing necessary services.

(7) Adult Protective Services shall coordinate and cooperate with other agencies to protect vulnerable adults.

(8) Adult Protective Services shall treat vulnerable adults and others in a courteous, dignified and professional manner.

R510-302-4. Definitions.

(1) All definitions found in Title 62A Chapter 3 are incorporated by reference.

(2) Activities of Daily Living means the ability to: take a full body bath or shower, including transfer in and out of the bath or shower; tend to personal hygiene needs, including care of teeth, dentures, shaving, and hair care; put on, fasten and take off all clothing, and select appropriate attire; walk without supervision or cues, including using a walker or cane; use steps or ramps; use toilet or commode, including transferring on and off toilet, cleansing self, changing pads, and caring for colostomy or catheter in appropriate manner; transfer without supervision or devices in and out of a bed or chair; and the ability to feed oneself, prepare food, drink or use necessary adaptive devices.

(2a) Instrumental Activities of Daily Living (ADL's) means the core life activities of independent living, including using the telephone, managing money, preparing meals, doing housework, remembering to take medications, providing for one's necessities, and obtaining services.

(3) Durable with respect to a power of attorney, means not terminated by the principals incapacity.

(4) Conservator means an individual or agency appointed by a court in accordance with Section 75-5-401, et seq.

(5) Guardian means an individual or agency appointed by a court in accordance with Section 75-5-303, et seq.

(6) Incapacitated Person is as defined in Section 75-1-201(18).

(7) Intentionally is as defined in Section 76-2-103(1).

(8) Knowingly is as defined in Section 76-2-103(2).

(9) Lifestyle Choice means a knowing and voluntary choice to live a certain way, including a non-conventional way, by a person who has capacity to make that choice.

(10) Limited Capacity means that an adult person's ability to understand, communicate, make decisions regarding the nature and consequences the person's life or property is limited in one or more, but not all, functional areas, or during identified times of day, due to a mental illness, developmental disability, organic brain disorder, physical illness or disability, chronic use of drugs, chronic intoxication, short-term memory loss, or other cause.

(11) Long-term care facility is as defined in Section 62A-3-202.

(12) Power of Attorney means a writing or other record that grants authority to an agent to act in the place of the principal, whether or not the term power of attorney is used.

(13) Protective intervention funding means payments made to the vulnerable adult, family, or caregiver or other provider that will alleviate or resolve a protective need.

(14) Protective Needs means factors identified by the APS Protective Needs Assessment that pose significant risk for, or are the result of Abuse, Neglect or Exploitation of a vulnerable adult.

(15) Protective Needs Assessment means an assessment of a vulnerable adult's impairments and alleged risk factors for Abuse, Neglect or Exploitation that are found to be present in that APS case investigation.

(16) Protective Supervision means an APS service offered to reduce or resolve a vulnerable adult's protective need.

(17) Recklessly is as defined in Section 76-2-103(3).

(18) Respite Care means a time-limited period of relief from care giving responsibilities paid to a respite care provider or individual from Protective Intervention Funds.

(19) Service Plan means a document created by the APS caseworker for an approved Short-term Service Case that includes a goal, objectives, methods, and progress reviews to resolve the protective needs identified in an Adult Protective Services investigation, and which implements recommendations of the case review committee.

(20) Short-term protective services include but are not limited to crisis intervention, emergency shelter, protective supervision, respite care, supported living services, or short-term intervention funding.

(21) Short-Term intervention funding means short-term payments made to the vulnerable adult, family, or caregiver or other provider, during a short-term service case for goods or services other than for Respite Care or Supported Living, that will alleviate or resolve a protective need.

(22) Supported Living means short-term payments made to individuals or providers that enable the vulnerable adult to remain in his or her own home or in the home of a relative.

R510-302-6. Adult Protective Services Intake Criteria.

(1) Referrals may be submitted to the APS Intake Office in any format from any person who has reason to believe that a vulnerable adult has been abused, neglected, or exploited in the State of Utah.

(2) All referrals shall be evaluated by APS Intake to determine whether APS shall investigate the allegation.

(3) APS shall accept all referrals with allegations of abuse, neglect, or exploitation of a vulnerable adult in the State of Utah except as follows:

(a) when the referral does not involve an allegation that a vulnerable adult may have been or is being abused, neglected or exploited.

(b) when the referral does not identify a current abuse, neglect or exploitation but anticipates that abuse, neglect or exploitation may occur.

(c) when the referral involves a vulnerable adult on an Indian reservation, a written agreement between APS and tribal authorities granting APS authority to investigate must be in effect or the referral shall be forwarded by Intake to federal or tribal authorities.

(d) when the referral involves an alleged incident in a long-term care facility involving an alleged theft or alleged loss of a resident's money and/or personal property, the alleged perpetrator(s) is unknown, and the money and/or personal property has been replaced, returned, or reimbursed by the facility.

(e) when the referral involves an alleged financial scam

and/or alleged consumer fraud.

(4) APS shall notify:

(a) the Department of Health and the Local Long-term Care Ombudsman when a referral involves a long-term care facility, and

(b) the Division of Services for People with Disabilities (DSPD), when the referral involves a person who receives services from DSPD.

(5) APS may submit a referral that involves a Division employee or other potential conflict of interest to the DHS Office of Services Review for review.

R510-302-7. Investigation.

(1) The assigned investigator shall initiate the investigation and determine whether:

(a) there is an allegation of abuse, neglect or exploitation;

(b) the alleged victim is a vulnerable adult;

(c) the alleged victim has the capacity to consent;

(d) the alleged victim has a legal guardian or conservator;

(e) an emergency exists; and

(f) the extent of the alleged victim's mental or physical impairment.

(2) The investigator shall make a face-to-face visit with the alleged victim.

(a) The investigator shall seek the consent of the vulnerable adult to provide services if the vulnerable adult has the capacity to consent.

(b) The investigator shall seek the consent of the vulnerable adult's legal guardian to provide services if the vulnerable adult does not have the capacity to consent.

(3) The investigator may not enter the home of a vulnerable adult unless the vulnerable adult, legal guardian, or caretaker consents, except when the investigator has reason to believe exigent circumstances exist to protect the vulnerable adult from imminent harm.

(4) The investigator shall interview the alleged perpetrator(s) unless:

(a) specifically requested not to do so by law enforcement officers in order to avoid impeding an ongoing criminal investigation or proceeding;

(b) interviewing the alleged perpetrator(s) would likely endanger or cause harm to any person;

(c) prior to interviewing the alleged perpetrator(s), the allegation is found to be without merit;

(d) APS is unable to locate the victim;

(e) the alleged victim died before the investigation started;

(f) the alleged perpetrator(s) cannot be located or is unknown after APS has made reasonable efforts to locate and/or identify the alleged perpetrator(s);

(g) the alleged perpetrator(s) has refused the interview, or

(5) When the investigator has reason to believe any hazardous waste or illegal drugs may be located at an investigative site, the investigator will contact law enforcement agencies and not enter the site until the local health department determines it is safe to do so. The law enforcement agencies may be asked:

(a) to assess and secure a vulnerable adult's immediate safety,

(b) facilitate the vulnerable adult's exit from the site,

(c) and arrange for emergency transportation to the hospital for decontamination.

(6) The investigator may obtain an administrative subpoena when one of the following circumstances applies:

(a) the vulnerable adult lacks the capacity to consent; or

(b) the vulnerable adult's legal guardian refuses to consent; or

(c) the custodian of the records or items pertinent to an investigation refuses to allow access to those records or items without a subpoena; or

(d) the information sought is necessary to investigate allegations of abuse, neglect or exploitation or to protect the alleged victim.

(7) An administrative subpoena form:

(a) shall include a list that specifically identifies the documents or objects being subpoenaed;

(b) is not valid until signed by the Director or Regional Director.

(8) The investigator shall document all items received as a result of the subpoena.

(9) the investigator shall evaluate all information obtained during the investigation and determine:

(a) whether each allegation of abuse, neglect and exploitation identified during the investigation is supported, inconclusive, or without merit; and

(c) law enforcement shall be contacted to coordinate or assist on an investigation, if the investigation indicates that criminal abuse, neglect or exploitation may have occurred or the safety of the any person is endangered.

(d) if an unmet (protective) need exists:

(i) the investigator may refer the vulnerable adult and the vulnerable adult's legal guardian to available community resources and services to resolve the protective need;

(ii) the investigator or Supervisor may request a review by the Case Review Committee to determine if Short-Term Services may help to resolve the protective need;

(iii) the investigator may make a referral to the Office of Public Guardian;

(iv) the investigator may provide crisis intervention to assist the vulnerable adult in obtaining services or benefits as it relates to the abuse, neglect or exploitation;

(v) the investigator may contact the family of a vulnerable adult who lacks capacity and inform the family that the vulnerable adult requires alternate living arrangements in an environment that is safe and meets the vulnerable adult's protective needs;

(vi) the investigator may provide Protective Intervention Funds at the sole discretion of APS. These funds may be made available to the vulnerable adult, family caregiver or other provider to alleviate or resolve a protective need, and must directly benefit the vulnerable adult;

(vii) the investigator may provide one-time payments for medications, medical treatment, or medical equipment or supplies not covered by insurance or other medical coverage; transportation; minor repairs or modifications; rent; food; or clothing, or other needs that directly benefit the vulnerable adult to alleviate or resolve a protective need; or

(viii) the investigator may provide payments for a service provider or individual for approved Short-term services for Respite care, Supported living, or for short-term intervention funds.

R510-302-8 Settlement Agreements.

(1) The Division may enter into a settlement agreement with the person who has received a notification of agency action letter pursuant to 62A-3-311.5.

(2) No settlement agreement shall be entered into once the Supported finding has been upheld by a court of competent jurisdiction.

R510-302-9. Eligibility.

(1) There are no income eligibility requirements for an APS investigation of allegations of abuse, neglect, or exploitation.

(2) There are no eligibility requirements in order to receive short-term protective supervision services.

(3) There are no eligibility requirements in order to receive Protective Intervention Funds to resolve a situational crisis or an immediate protective need.

(4) A vulnerable adult shall meet income eligibility requirements in order to receive short-term protective services other than protective supervision services, including respite care, supported living, short-term intervention funding, and other services approved by the APS Director or regional director.

(a) For purposes of eligibility for short-term protective services, "family" includes an adult, the adult's spouse, and their natural children under age 18, who are residing in the same household.

(b) A person living under the care of someone other than their spouse is considered a one-person family.

(c) In determining whether a vulnerable adult meets income eligibility requirements for short-term protective services, family assets shall be disclosed and evaluated.

(i) Family assets include the fair market value of stocks, bonds, certificates of deposit, notes, savings and checking accounts, inheritance, capital gains, or gifts, which can be readily converted to cash.

(ii) A client's income and deductions will be used to determine the client's adjusted gross income to determine the client's eligibility status.

(iii) Monthly gross income includes the total monthly income received by an individual from earnings, military pay, commissions, tips, piece-rate payments, and cash bonuses; net income from self-employment; Social Security Pensions, SSI, Survivor's Benefits, and Permanent Disability Insurance payments; dividends, interest, income from estates or trusts, net rental income or royalties, net income from rental of property, receipts from boarders or lodgers; pensions, annuities; unemployment compensation; strike benefits; worker's compensation; alimony, child support, money received as specified in a divorce or support decree; Veterans' pensions or subsistence allowances; and other regular (three out of six months) financial assistance.

(iv) Monthly gross income does not include per capita payments to or funds held in trust for any individual in satisfaction of a judgment of the Indian Claims Commission or the Court of Claims; net proceeds received from the sale of a primary residence or an automobile; money borrowed; insurance payments in excess of incurred costs that must be paid from the settlement; the value of the coupon allotment under the Food Stamp Act; the value of USDA donated foods; the value of supplemental food assistance under the Child Nutrition Act of 1966 and the special food service program for children under the National School Lunch Act; any payment received under the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970; earnings of a child (under 18 years of age) residing in the home; payments for energy assistance and weatherization HEAT program; housing subsidies paid by the Federal government; payments or grants received due to natural disaster; educational loans, grants, or scholarships to any undergraduate student for educational purposes that is made or insured by the U.S. Commissioner of Education (BEOG; SEOG; NDSL; Guaranteed Student Loans; SSIG; and PELL Grants); payments to participate in a service learning program, such as College Work-Study or University Year for Action; and that portion of any other loan, grant, or scholarship which is conditioned upon school attendance, actually used for tuition, books, fees, equipment, special clothing needs, transportation to and from the school, and the child care services necessary for school attendance.

(v) The expenses that shall be deducted in determining adjusted gross income are limited to medical expenses (including Medicaid spend-down and insurance); storage expenses; child support paid, including money paid for house payments, rent, etc. as specified in a divorce or support decree; the dollar amount of first mortgage/rental payment over 25% of monthly countable income (not counted for Foster Care); and

fees paid for other programs and protective services.

(vi) The sum of all family assets shall be divided by the number of family members, and if that amount exceeds \$4,000 per family member, then the value over \$4,000 shall be prorated over twelve months, and the resulting amount shall be added to the monthly countable income.

(vii) Eligibility status must be verified annually and within 30 days of any family member's increase in assets.

(viii) A client's adjusted gross income for income tax purposes is not the same as the adjusted gross income for service eligibility purposes.

(ix) All family assets and expenses shall be supported with current bank records, check stubs, and other verifiable records. Documentation must clearly indicate the name of the applicable family member.

R510-302-10. Protective Need Intervention.

(1) APS may petition the court for an emergency protective services order as outlined in 62A-3-320

(2) An Investigator may request Protective Intervention Funding for an emergency shelter placement to alleviate the vulnerable adult's protective need. Emergency shelter placements may be made for up to 30 days within a twelve-month period for a vulnerable adult who has been abused, neglected, or exploited only if:

(a) the vulnerable adult's circumstances require immediate alternate living arrangements in a safe environment;

(b) the vulnerable adult or legal guardian consents to the emergency shelter placement or a court order authorizes the placement;

(c) the vulnerable adult does not meet the eligibility requirements for shelter under the Family Violence program; and

(d) the emergency shelter has all required current licenses and certifications.

R510-302-11. Short-Term Intervention.

(1) Short-term protective services may only be provided to a vulnerable adult who is the victim of abuse, neglect or exploitation, and in accordance with the terms of a service plan consented to and signed by the vulnerable adult or the vulnerable adult's legal guardian, or pursuant to a court order. An updated service plan shall be signed at each case review.

(2) A short-term services Case Review Committee shall monitor and review short-term services. The Case Review Committee:

(a) shall consist of the primary worker, supervisor or designee, and two other region workers. The Committee may include other APS and community or agency individuals when determined necessary by the Case Review Committee.

(b) shall oversee the progress made towards resolution of the protective need.

(c) may recommend that short-term services are initiated, extended, or terminated.

(d) may recommend community referrals or alternative actions.

(3) The Case Supervisor may approve or deny Short-Term Services recommended by the Case Review Committee.

(4) Short-Term Services may only be provided under the following conditions:

(a) Short-term services are voluntary and shall not be implemented without the written consent of the vulnerable adult or the vulnerable adult's legal representative.

(b) Every short-term service case shall include a protective supervision service.

(c) Protective Intervention funds for Short-term services shall not be disbursed without the approval of the APS supervisor or regional director.

(d) Respite Care funds may not be used for caring for

other members of the family, performing extensive household tasks, or transportation.

(e) Respite Care may be provided in the vulnerable adult's home, a caregiver's home, or in a licensed facility.

(f) Supported Living Payments may be made to providers to enable the vulnerable adult to remain in his own home or in the home of a relative, and may include short-term supervision, transportation, assistance with shopping, training or assistance with activities of daily living.

(g) Payments for Short-Term Services may not be made until a case has been approved by the Case Review Committee and Services voluntarily agreed to in writing by the vulnerable adult, his or her guardian, or approved by court order.

R510-302-12. Protective Payee Services.

(1) Adult Protective Services shall not provide payee services.

R510-302-13. Termination of Short-Term Protective Services.

(1) A vulnerable adult has no entitlement or right to short-term protective services from APS.

(2) Protective Services may be terminated by the vulnerable adult or APS at any time, except if there is a Court order in place.

(3) Protective Services shall be terminated when:

(a) the vulnerable adult is no longer in immediate danger of abuse, neglect or exploitation;

(b) a vulnerable adult who voluntarily accepted services requests that those services be terminated;

(c) recommended by the Case Review Committee;

(d) the court terminates an order requiring APS to provide services;

(e) the vulnerable adult is receiving protective services from other persons or agencies;

(f) the vulnerable adult's behavior is abusive or violent and constitutes a threat;

(g) the vulnerable adult no longer meets the eligibility requirements for services;

(h) the vulnerable adult refuses to comply with the service plan;

(i) there is insufficient funding to pay for the service;

(j) the vulnerable adult moves out of State; or

(k) the vulnerable adult dies. APS shall complete a Deceased Client Report form in accordance with DHS policy 05-02.

(4) When APS terminates Short-Term protective services, a letter shall be sent to the vulnerable adult stating the case is going to be terminated and the reason for termination.

(a) The letter shall state that termination becomes effective 10 days from the date the letter was sent unless the vulnerable adult requests an administrative review of the reason for the termination and to decide if the services should be reinstated or alternative services may be available.

KEY: vulnerable adults, adult protective services investigation, shelter care facilities, short-term services
August 7, 2017 62A-3-301 et seq.
Notice of Continuation June 30, 2017

R512. Human Services, Child and Family Services.**R512-205. Child Protective Services, Investigation of Domestic Violence Related Child Abuse.****R512-205-1. Purpose and Authority.**

(1) The purpose of this rule is to establish criteria for investigation of an allegation of Domestic Violence Related Child Abuse and the basis upon which a supported finding will be made.

(2) This rule is authorized by Section 62A-4a-102.

R512-205-2. Definitions.

(1) "Cohabitant" has the same meaning as in Section 78B-7-102.

(2) "Dangerous weapon" has the same meaning as in Section 76-1-601.

(3) "Child and Family Services" means the Department of Human Services, Division of Child and Family Services.

(4) "Domestic violence" has the same meaning as in Section 77-36-1.

(5) "Domestic Violence Related Child Abuse" means domestic violence between cohabitants in the presence of a child. It may be an isolated incident or a pattern of conduct.

(6) "In the presence of a child" has the same meaning as in Section 76-5-109.1.

(7) "Serious bodily injury" has the same meaning as in Section 76-1-601.

(8) "Substantial bodily injury" has the same meaning as in Section 76-1-601.

R512-205-3. Administrative Findings.

(1) The commission of acts of domestic violence in the presence of a child is child abuse, because it results in non-accidental harm or threatened harm to the child. Such abuse is subject to the reporting statute (Section 62A-4a-403).

(2) Research establishes that exposure to domestic violence causes emotional or developmental harm or threatened harm to children, which may later be manifested in behavioral problems, increased risk of drug or alcohol abuse, increased risk of becoming perpetrators or victims of abuse, or in emotional disorders such as post-traumatic stress disorder.

(3) Exposure to domestic violence may also threaten a child with physical harm.

(4) Awaiting the manifestation of emotional or developmental harm does not protect children from such harm, and early intervention is required to mitigate and prevent further harm.

(5) Accordingly, establishing the commission of an act of domestic violence in the presence of a child shall be sufficient to establish Domestic Violence Related Child Abuse, without any further evidence of harm.

(6) The primary responsibility to investigate allegations of Domestic Violence Related Child Abuse as defined in Section 76-5-109.1 lies with law enforcement, and Child and Family Services has no responsibility to investigate domestic violence in the presence of a child as described in that section, except as provided in this rule (see Section 62A-4a-105(6)).

R512-205-4. Investigation.

(1) An allegation of Domestic Violence Related Child Abuse, that meets all other requirements for acceptance, shall be accepted by Child and Family Services for investigation if it is alleged that a child was physically present or saw or heard an incident of domestic violence and:

(a) The alleged perpetrator used or threatened to use a dangerous weapon; or

(b) The alleged perpetrator threatened to cause substantial or serious bodily injury; or

(c) The alleged perpetrator committed a sexual assault, impeded the breathing or the circulation of blood by application

of pressure to the neck, throat, or chest, or by the obstruction of the nose or mouth, which produced or was likely to produce a loss of consciousness, or other assault likely to result in substantial or serious bodily injury; or

(d) The alleged victim sustained substantial or serious bodily injury; or

(e) There is a pattern of two or more CPS investigations of Domestic Violence Related Child Abuse within the previous two years; or

(f) Another allegation of abuse, neglect, or dependency is being accepted or is in the process of being investigated.

(2) If during an open, non-CPS case, a referral is received for Domestic Violence Related Child Abuse which does not meet the criteria for acceptance under subparagraph (1) above, the information will be sent to the ongoing caseworker for assessment.

R512-205-5. Investigation Findings.

(1) Upon completion of an investigation of Domestic Violence Related Child Abuse, a supported finding may be based upon the definitions of this rule.

KEY: child abuse, domestic violence**August 28, 2017****Notice of Continuation January 25, 2016****62A-4a-102****62A-4a-105****76-5-109.1**

R590. Insurance, Administration.**R590-96. Rule to Recognize New Annuity Mortality Tables for Use in Determining Reserve Liabilities for Annuities.****R590-96-1. Authority.**

This rule is promulgated by the Insurance Commissioner pursuant to Sections 31A-2-201, and 31A-17-505.

R590-96-2. Purpose.

The purpose of this rule is to recognize the following mortality tables for use in determining the minimum standard of valuation for annuity and pure endowment contracts: the 1983 Table (a), the 1983 Group Annuity Mortality (1983 GAM) Table, the Annuity 2000 Mortality Table, the 2012 Individual Annuity Reserving (2012 IAR) Table, and the 1994 Group Annuity Reserving (1994 GAR) Table.

R590-96-3. Definitions.

A. As used in this rule "Period Table" means a table of mortality rates applicable to a given calendar year.

B. As used in this rule "Generational Mortality Table" means a mortality table containing a set of mortality rates that decrease for a given age from one year to the next based on a combination of a period table and a projection scale containing mortality improvement factors.

C. As used in this rule "1983 Table (a)" means that mortality table developed by the Society of Actuaries Committee to Recommend a New Mortality Basis for Individual Annuity Valuation, adopted by the NAIC in June 1982 as a recognized mortality table for annuities, and published in the 1982 Proceedings of the NAIC II, page 454.

D. As used in this rule "1983 GAM Table" means that mortality table developed by the Society of Actuaries Committee on Annuities, adopted by the NAIC in December 1983 as a recognized mortality table for annuities, and published in 1984 Proceedings of the NAIC I, pages 414-415.

E. As used in this rule "1994 GAM Table" means the 1994 Group Annuity Mortality Static Table, a period table containing loaded mortality rates for calendar year 1994, developed by the Society of Actuaries Group Annuity Valuation Table Task Force, and published in the Transactions of the Society of Actuaries, Vol. XLVII (1995), pages 898-899.

F. As used in this rule "Projection Scale AA" means that table of annual mortality improvement factors for projecting future mortality rates beyond calendar year 1994, developed by the Society of Actuaries Group Annuity Valuation Table Task Force, and published in the Transactions of the Society of Actuaries, Vol. XLVII (1995), 824-826.

G. As used in this rule "1994 GAR Table" means the 1994 Group Annuity Reserving Table, a generational mortality table developed by the Society of Actuaries Group Annuity Valuation Table Task Force, derived from a combination of 1994 GAM Table and the Projection Scale AA as described in Subsection R590-96-7, adopted by the NAIC in December 1996 as a recognized mortality table for annuities, and published in the Transactions of the Society of Actuaries, Vol. XLVII (1995), pages 866-867.

H. As used in this rule "Annuity 2000 Mortality Table" means that mortality table developed by the Society of Actuaries Committee on Life Insurance Research adopted by the NAIC in December 1996 as a recognized mortality table for annuities, and published in the Transactions of the Society of Actuaries, Vol. XLVII (1995), page 240.

I. As used in this rule "2012 IAM Period Table" means that period table containing loaded mortality rates for calendar year 2012, developed by the Society of Actuaries Committee on Life Insurance Research, and published in the 2012 Proceedings of the NAIC, Fall Volume I, pages 149-150.

J. As used in this rule "Projection Scale G2" means that table of annuity mortality improvement factors for projecting

future mortality rates beyond calendar year 2012, developed by the Society of Actuaries Committee on Life Insurance Research, and published in the 2012 Proceedings of the NAIC, Fall Volume I, pages 151-152.

K. As used in this rule "2012 IAR Table" means that generational mortality table developed by Society of Actuaries Committee on Life Insurance Research, derived from a combination of the 2012 IAM Period Table and the Projection Scale G2 as described in Subsection R590-96-5, adopted by the NAIC in December 2012, and published in the 2012 Proceedings of the NAIC, Fall Volume I, pages 149-152.

L. The tables identified in R590-96-3.C through K, are hereby incorporated by reference within this rule and are available at the department's website <https://insurance.utah.gov/legal-resources/rules/current-rules.php>.

R590-96-4. Individual Annuity or Pure Endowment Contracts.

A. Except as provided in Subsections R590-96-4.B through E, the 1983 Table (a) is recognized and approved as an individual annuity mortality table for valuation and, at the option of the company, may be used for purposes of determining the minimum standard of valuation for any individual annuity or pure endowment contract issued on or after April 2, 1980.

B. Except as provided in Subsections R590-96-4.C through E, either the 1983 Table (a) or the Annuity 2000 Mortality Table shall be used for determining the minimum standard of valuation for any individual annuity or pure endowment contract issued on or after July 1, 1985.

C. Except as provided in Subsections R590-96-4.D and E, the Annuity 2000 Mortality Table shall be used for determining the minimum standard of valuation for any individual annuity or pure endowment contract issued on or after July 1, 1999.

D. Except as provided in Subsection R590-96-4.E, the 2012 IAR Table shall be used for determining the minimum standard of valuation for any individual annuity or pure endowment contract issued on or after January 1, 2015.

E. The 1983 Table (a) without projection is to be used for determining the minimum standards of valuation for an individual annuity or pure endowment contract issued on or after July 1, 1999, solely when the contract is based on life contingencies and is issued to fund periodic benefits arising from:

- (1) Settlements of various forms of claims pertaining to court settlements or out of court settlements from tort actions;
- (2) Settlements involving similar actions such as worker's compensation claims; or
- (3) Settlements of long term disability claims where a temporary or life annuity has been used in lieu of continuing disability payments.

R590-96-5. Application of the 2012 IAR Table.

A. In using the 2012 IAR Table, the mortality rate for a person age x in year $(2012 + n)$ is calculated as follows: $q_x^{2012+n} = q_x^{2012} (1 - G2_x)^n$, where q_x^{2012} is a mortality rate applicable to a person age x in the 2012 IAM Period Table and $G2_x$ is an annual mortality improvement factor applicable to a person age x in the Projection Scale G2.

B. The resulting mortality rate q_x^{2012+n} shall be rounded to six decimal places.

R590-96-6. Group Annuity or Pure Endowment Contracts.

A. Except as provided in Subsections R590-96-6.B and C, the 1983 GAM Table, the 1983 Table (a) and the 1994 GAR Table are recognized and approved as group annuity mortality tables for valuation and, at the option of the company, any one of these tables may be used for purposes of valuation for an annuity or pure endowment purchased on or after April 2, 1980

under a group annuity or pure endowment contract.

B. Except as provided in Subsection R590-96-6.C, either the 1983 GAM Table or the 1994 GAR Table shall be used for determining the minimum standard of valuation for any annuity or pure endowment purchased on or after July 1, 1985 under a group annuity or pure endowment contract.

C. The 1994 GAR Table shall be used for determining the minimum standard of valuation for any annuity or pure endowment purchased on or after July 1, 1999 under a group annuity or pure endowment contract.

R590-96-7. Application of the 1994 GAR Table.

In using the 1994 GAR Table, the mortality rate for a person age x in year $(1994 + n)$ is calculated as follows: $q_x^{1994+n} = q_x^{1994} (1 - AA_x)^n$; where the q_x^{1994} is a mortality rate applicable to a person age x in the 1994 GAM Table and AA_x is an annual mortality improvement factor applicable to a person age x in the Projection scale AA.

R590-96-8. Separability.

If any provision of this rule or its application to any person or circumstances is for any reason held to be invalid, the remainder of the regulation and the application of such provision to other persons or circumstances may not be affected by it.

KEY: insurance law

January 21, 2014

Notice of Continuation August 18, 2017

31A-2-201

31A-17-505

R590. Insurance, Administration.**R590-166. Home Protection Service Contract Rule.****R590-166-1. Authority.**

This rule is issued by the Insurance Commissioner pursuant to the authority granted under Subsection 31A-2-201(3) to adopt rules for the implementation of the Utah Insurance Code and under Subsections 31A-6a-110(1) and (2).

R590-166-2. Purpose and Scope.

The purpose of this rule is to establish certain exemptions from the requirements of Chapter 6a of Title 31A as it relates to home protection companies as defined herein.

R590-166-3. Definition.

A. "Home protection service contract," also referred to as "home service contract" or "home warranty," means a service contract as defined by Subsection 31A-6a-101(4)(a) whereby a person, other than a builder, seller, or lessor of a home which is the subject of the contract, undertakes, for a specified period of time and for a predetermined fee, to repair or replace components, systems, or appliances of such home upon mechanical or operational failure, or to make indemnification to the holder of such contract for such repair or replacement.

B. "Home protection company" means a service contract provider as defined by 31A-6a-101(6) who issues home protection service contracts, excluding insurers authorized for casualty insurance.

R590-166-4. Rule.

A. Upon prior written notification to the commissioner, home protection companies doing business in this state who are, at the time of notification, in compliance with all the terms and provisions set forth in this rule and are in compliance with all of the terms and provisions of Chapter 6a of Title 31A, except those terms and provisions specifically exempted herein, shall be exempt from the requirements of Subsections 31A-6a-103(1)(a) and (b), and 31A-6a-103(2)(b)(iv) and the requirements of Subsections 31A-6a-104(1)(a) and (b), and 31A-6a-104(2)(a)(i); provided, however, that nothing herein shall abrogate the requirement that home protection companies file copies of the service contracts to be used in this state, and any modifications thereto as would otherwise be required pursuant to Subsections 31A-6a-103(2)(a) and (b). So long as a home protection company remains in compliance with this rule, the home protection company's election to be subject to this rule shall remain in effect until written notification to the commissioner by the company of the company's withdrawal of its election. Notwithstanding the foregoing, home protection companies who are doing business in this state prior to the effective date of this rule and who elect to be subject to this rule as of the rule's effective date shall have until 60 days from the rule's effective date to attain compliance with all the terms and provisions of the rule.

B. To assure the faithful performance of its obligations to its contract holders the home protection company shall deposit in accordance with Section 31A-2-206 an amount not less than \$10,000 for each 500 home protection service contracts in force in this state, but not to exceed \$100,000. In the event of any failure of the home protection company to perform its obligations to its contract holders, the commissioner may make equitable distributions to contract-holders from funds held on deposit.

C. In lieu of the deposit required in paragraph B above, a surety bond or irrevocable letter of credit in favor of the commissioner for \$50,000 may be filed by the home protection company. When, based on the home protection company's annual report pursuant to Section 5(A) hereof, the number of home protection service contracts issued by a protection company then in force in this state exceeds 2,500, the amount of

the surety bond or letter of credit shall be increased to \$100,000. The bond shall be issued by an insurer authorized to transact surety business in this state. Any letter of credit shall be from a bank approved by the commissioner and in a form acceptable to the commissioner. The surety bond or letter of credit shall be held for the same purpose as the deposit in lieu of which it is filed. No bond or letter of credit shall be cancelled or subject to cancellation unless at least 30 days advance notice, in writing, thereof is filed with the commissioner and evidence of other security is provided.

D. The securities, bond or letter of credit of a home protection company deposited as required by this rule shall constitute a claim fund to be administered by the commissioner for the benefit of persons sustaining actionable injury due to the insolvency or impairment of the home protection company. The commissioner may, at his option, seek assumption of an insolvent home protection company's obligations and business by a solvent company, and apply the insolvent home protection company's deposit or proceeds of any surety bond or letter of credit to this purpose.

E. Any deposit, surety bond or letter of credit shall be maintained unimpaired as long as the home protection company continues to do business in this state. Whenever the home protection company ceases to do business in this state and furnishes the commissioner proof that it has discharged or otherwise adequately provided for all its obligations to its home protection service contract holders in this state, the commissioner shall authorize release of the deposited securities, surety bond or letter of credit on file at that time.

R590-166-5. Annual Statements, Interim Reports.

A. A home protection company electing to be subject to this rule shall annually, within 90 days after the close of its fiscal year, file with the commissioner its annual statement in a form prescribed by the commissioner. Such annual statement shall include a current financial statement prepared in accordance with generally accepted accounting principles, reviewed by an independent certified public accountant, and verified by the home protection company's president and principal financial or accounting officer.

B. Each annual statement shall also report the home protection company's volume of business in this state during the preceding fiscal year, the losses thereon, open depositories at year end, and a statement of assets and liabilities.

C. A home protection company which fails to file its annual statement in the form and within the time provided in this rule may be fined \$500 for each month, or any part thereof, during which such delinquency continues, and upon notice by the commissioner, its election to be subject to this rule may be suspended or revoked until such delinquency is cured to the satisfaction of the commissioner.

D. In addition to an annual statement, the commissioner may require of any particular home protection company, in any situation where that home protection company's ability to service its obligations to holders or creditors is in reasonable doubt, such additional regular or special reports as the commissioner may deem necessary.

R590-166-6. Severability.

If a provision of this rule or the application thereof to any person or circumstance is for any reason held to be invalid, the remainder of the rule and the application of such provisions is not effected.

KEY: insurance
January 24, 2006
Notice of Continuation April 7, 2014

31A-2-201
31A-6a-110

R590. Insurance, Administration.**R590-216. Standards for Safeguarding Customer Information.****R590-216-1. Authority.**

This rule is promulgated pursuant to Subsections 31A-2-202(1), 31A-2-201(2) and 31A-2-201(3)(a) in which the commissioner is empowered to administer and enforce Title 31A, to perform duties imposed by Title 31A and to make administrative rules to implement the provisions of Title 31A. Furthermore, Title V, Section 505 (15 United States Code (U.S.C.) 6805)) empowers the Utah Insurance Commissioner to enforce Subtitle A of Title V of the Gramm-Leach-Bliley Act of 1999 (15 U.S.C. 6801 through 6820). Title V, Section 505 (15 U.S.C. 6805(b)(2)) authorizes the commissioner to issue rules to implement the requirements of Title V, Section 501(b) of the federal act. The commissioner is also authorized under Subsection 31A-23a-417(3) to adopt rules implementing the requirements of Title V, Section 501(b) of the federal act.

R590-216-2. Purpose and Scope.

(1) This rule establishes standards applicable to the department's licensees to assist them in developing and implementing administrative, technical and physical safeguards to protect the security, confidentiality and integrity of customer information, pursuant to Sections 501, 505(b), and 507 of the Gramm-Leach-Bliley Act, codified at 15 U.S.C. 6801, 6805(b) and 6807.

(2) Section 501(a) provides that it is the policy of the Congress that each financial institution has an affirmative and continuing obligation to respect the privacy of its customers and to protect the security and confidentiality of those customers' nonpublic personal information. Section 501(b) requires the state insurance regulatory authorities to establish appropriate standards relating to administrative, technical and physical safeguards:

(a) to ensure the security and confidentiality of customer records and information;

(b) to protect against any anticipated threats or hazards to the security or integrity of such records; and

(c) to protect against unauthorized access to or use of records or information that could result in substantial harm or inconvenience to a customer.

(3) Under Section 505(b)(2) state insurance regulatory authorities are to implement the standards prescribed under Section 501(b) by rule with respect to persons engaged in providing insurance.

(4) Section 507 provides, among other things, that a state rule may afford persons greater privacy protections than those provided by Subtitle A of Title V of the Gramm-Leach-Bliley Act. This rule requires that the safeguards established pursuant to the rule shall apply to nonpublic personal information, including nonpublic personal financial information and nonpublic personal health information that licensees of the department obtain from their customers.

R590-216-3. Definitions.

For purposes of this rule, the following definitions apply:

(1) "Customer" means a customer of the licensee as the term customer is defined in Rule R590-206, Privacy of Consumer Financial and Health Information Rule, Subsection 4(9).

(2) "Customer information" means nonpublic personal information as defined in Subsection R59-206-4(19) about a customer, whether in paper, electronic or other form, that is maintained by or on behalf of the licensee.

(3) "Customer information systems" means the electronic or physical methods used to access, collect, store, use, transmit, protect or dispose of customer information.

(4) "Licensee" means a licensee as that term is defined in

Subsection R590-206-4(17)(a), except that "licensee" shall not include: a purchasing group; manufacturer or seller warranty provider and manufacturer or seller service contract provider exempted by R590-210, Privacy of Consumer Information Exemption for Manufacturer Warranties and Service Contract; or an unauthorized insurer in regard to the excess line business conducted pursuant to Section 31A-15-103.

(5) "Service provider" means a person that maintains, processes or otherwise is permitted access to customer information through its provision of services directly to the licensee.

R590-216-4. Information Security Program.

Each licensee shall implement a comprehensive written information security program that includes administrative, technical and physical safeguards for the protection of customer information. The administrative, technical and physical safeguards included in the information security program shall be appropriate to the size and complexity of the licensee and the nature and scope of its activities.

R590-216-5. Objectives of Information Security Program.

A licensee's information security program shall be designed to:

(1) Ensure the security and confidentiality of customer information;

(2) Protect against any anticipated threats or hazards to the security or integrity of the information; and

(3) Protect against unauthorized access to or use of the information that could result in substantial harm or inconvenience to any customer.

R590-216-6. Examples of Methods of Development and Implementation.

The actions and procedures described in this section are examples of methods of implementation of the requirements of Sections 4 and 5 of this rule. These examples are non-exclusive illustrations of actions and procedures that licensees may adopt to implement Sections 4 and 5 of this rule.

(1) For risk assessment, the licensee may:

(a) identify reasonably foreseeable internal or external threats that could result in unauthorized disclosure, misuse, alteration or destruction of customer information or customer information systems;

(b) assess the likelihood and potential damage of these threats, taking into consideration the sensitivity of customer information; and

(c) assess the sufficiency of policies, procedures, customer information systems and other safeguards in place to control risks.

(2) For risk management and control, the licensee may:

(a) design its information security program to control the identified risks, commensurate with the sensitivity of the information, as well as the complexity and scope of the licensee's activities;

(b) train staff, as appropriate, to implement the licensee's information security program; and

(c) regularly test or otherwise regularly monitor the key controls, systems and procedures of the information security program. The frequency and nature of these tests or other monitoring practices are determined by the licensee's risk assessment.

(3) For service provider arrangement oversight, the licensee may:

(a) exercise appropriate due diligence in selecting its service providers; and

(b) require its service providers to implement appropriate measures designed to meet the objectives of this rule, and, where indicated by the licensee's risk assessment, takes

appropriate steps to confirm that its service providers have satisfied these obligations.

(4) For program adjustment, the licensee may monitor, evaluate and adjust, as appropriate, the information security program in light of any relevant changes in technology, the sensitivity of its customer information, internal or external threats to information, and the licensee's own changing business arrangements, such as mergers and acquisitions, alliances and joint ventures, outsourcing arrangements and changes to customer information systems.

R590-216-7. Determined Violation.

Violation of any provision of the rule will result in appropriate enforcement action by the department, which may include forfeiture, penalties, and revocation of license as provided in Section 31A-2-308.

R590-216-8. Enforcement Date.

The commissioner will begin enforcing the provisions of this rule 120 days from the effective date of the rule.

KEY: insurance

September 26, 2002

Notice of Continuation August 18, 2017

31A-2-201

31A-2-202

31A-23a-417

15 U.S.C. 6801

15 U.S.C. 6805

15 U.S.C. 6807

R590. Insurance, Administration.**R590-274. Submission and Required Disclosures of Public Adjuster Contracts.****R590-274-1. Authority.**

This rule is promulgated by the commissioner pursuant to Sections 31A-26-401 and 31A-26-403.

R590-274-2. Purpose and Scope.

(1) The purpose of this rule is to:

(a) Set forth procedures on how public adjusters must submit required form filings to the commissioner pursuant to Section 31A-26-401; and

(b) provide notice requirements, information and disclosures that must be included in the adjuster contracts.

(2) This rule applies to resident and nonresident public adjusters.

R590-274-3. Definitions.

In addition to the definitions in Sections 31A-1-301 and 31A-19a-102, the following definitions shall apply for the purpose of this rule:

(1) "Certification" means a statement that the filing being submitted is in compliance with Utah laws and rules.

(2) "Electronic Filing" means a filing submitted via an email system.

(3) "File And Use" means a filing can be used, sold, or offered for sale after it has been filed with the department.

(4) "Filer" means a person who submits a filing.

(5) "Filing Objection Letter" means a letter issued by the commissioner when a review has determined the filing fails to comply with Utah law and rules. The filing objection letter may, in addition to requiring correction of non-compliant items, request clarification or additional information pertaining to the filing.

(6) "Form" for the purposes of this rule form shall also include contracts.

(7) "Order to Prohibit Use" means an order issued by the commissioner that prohibits the use of a filing.

(8) "Rejected" means a filing is:

(a) not submitted in accordance with applicable laws and rules;

(b) returned to the filer by the department with the reasons for rejection; and

(c) not considered filed with the department.

(9) "Utah Filed Date" means the date provided to a filer by the Utah Insurance Department that indicates a filing has been accepted.

R590-274-4. General Filing Information.

(1) Each filing submitted must be accurate, consistent, complete, and contain all required documents in order for the filing to be processed in a timely and efficient manner. The commissioner may request any additional information deemed necessary.

(2) The filer is responsible for assuring that a filing is in compliance with Utah laws and rules. A filing not in compliance with Utah laws and rules is subject to regulatory action under Section 31A-2-308.

(3) A filing that does not comply with this rule will be rejected and returned to the filer. A rejected filing:

(a) is not considered filed with the department and may not be used;

(b) will not be reopened for purposes of resubmission, a new filing is required.

(4) A prior filing will not be researched to determine the purpose of the current filing. The submitted filing must be complete.

(5) The department does not review or proofread every filing.

(a) A filing may be reviewed:

(i) when submitted;

(ii) as a result of a complaint;

(iii) during a regulatory examination or investigation; or

(iv) at any other time the commissioner deems necessary.

(b) If a filing is reviewed and is not in compliance with Utah laws and rules, A Filing Objection Letter or an Order To Prohibit Use will be issued to the filer. The commissioner may require the licensee to disclose deficiencies in forms to affected consumers.

(6) Filing correction:

(a) If the filing is in a review status corrections can be made at any time.

(b) If the filing has been closed a new filing is required. The filer must reference the original filing in the filing description.

(7) Response to a Filing Objection Letter. When responding to a Filing Objection letter a filer must:

(a) provide an explanation identifying all changes made;

(b) include an underline and strikeout version for each revised document;

(c) a final version of revised documents that incorporates all changes.

(8) Response to an Order to Prohibit Use.

(a) An Order to Prohibit Use becomes final 15 days after the date of the order.

(b) Use of the filing must be discontinued no later than the date specified in the Order.

(c) To contest an Order to Prohibit Use, the commissioner must receive a written request for a hearing no later than 15 days after the date of the Order.

(d) A new filing is required if the licensee chooses to make the requested changes addressed in the Filing Objection Letter. The new filing must reference the previously prohibited filing.

(9) Filing withdrawal. A filer must notify the department when withdrawing a previously filed form.

R590-274-5. Filing Requirements.

(1) All filings must be submitted as an electronic filing via email at pforms@utah.gov.

(2) A complete filing consists of the following:

(a) the title of the email must display the company name only;

(b) the filer must certify that a filing has been properly completed and is in compliance with Utah laws and rules;

(i) To certify the following statement must be included in the email: "BY SUBMITTING THIS FILING I CERTIFY THAT THE ATTACHED FILING HAS BEEN COMPLETED IN ACCORDANCE WITH UTAH ADMINISTRATIVE RULE R590-274 AND IS IN COMPLIANCE WITH APPLICABLE UTAH LAWS AND RULES".

(ii) A filing will be rejected if the certification is false, missing, or incomplete.

(iii) A certification that is false may subject the licensee to administrative action.

(c) provide a description of the filing including:

(i) the intent of the filing; and

(ii) the purpose of each document within the filing.

(d) indicate if the filing:

(i) is new;

(ii) is replacing or modifying a previous submission; if so, describe the changes made, if previously rejected the reasons for rejection, and previous filing's Utah Filed Date; and

(e) identify if any of the provisions are unusual, controversial, have been previously objected to, or prohibited, and explain why the provision is included in the filing.

(3) Forms being submitted for filing:

(a) must be in PDF format;

(b) are considered "File And Use" filings;

(c) each form must be identified by a unique form number. The form number may not be a variable; and

(d) must be in final printed form. A draft may not be submitted.

R590-274-6. Contract Requirements.

(1) The contract must contain the following:

(a) the name of the company that employs the public adjuster;

(b) the mailing and physical address of the public adjuster's principal place of business;

(c) the public adjuster's telephone and fax number;

(d) the license number of the public adjuster and the Employer;

(e) the public adjuster's email address;

(f) the public adjuster's website, if applicable;

(g) the date and time the contract was signed and, if applicable, the service of process address for nonresident public adjusters;

(h) a general description of services the public adjuster will provide under the contract;

(i) a description of the claim, property damage, location, and event;

(j) if based on an hourly rate, a provision that the public adjuster will provide an invoice for services that includes a detailed listing of service provided and separate costs payable to the public adjuster as part of any commission based on the claim settlement, including expenses, direct costs, and any other accrued costs; and

(k) all terms or conditions that apply to the contract.

(2) The contract may not contain any terms or conditions that have the effect of limiting or nullifying any requirements of the law.

(3) A signed copy of the contract must be provided to the insured at the time of signing.

R590-274-7. Required Disclosures.

(1) The following separate disclosures are required in no smaller than 12 point boldface type to be located on the signature page of the contract:

(a) "WE REPRESENT THE INSURED ONLY";

(b) "THIS CONTRACT MAY BE RESCINDED IN WRITING WITHIN 10 DAYS OF ENTERING INTO THE CONTRACT"; and

(c) "YOU ARE ENTERING INTO A CONTRACT OF SERVICE. YOU ARE BEING CHARGED A FEE FOR THIS SERVICE. YOU DO NOT HAVE TO ENTER INTO THIS CONTRACT TO MAKE A CLAIM FOR LOSS OR DAMAGE ON A POLICY OF INSURANCE".

(2) A contract must contain the following statements in substantially the following form:

(a) A public adjuster may not participate directly or indirectly in the reconstruction, repair, or restoration of damaged property, or engage in any other activities that may reasonably be construed as presenting a conflict of interest, including soliciting or accepting any remuneration from, or having a financial interest in, any salvage firm, construction firm, repair firm, or other firm that obtains business in connection with any claim the public insurance adjuster has a contract or agreement to adjust.

(b) A public adjuster may not act on behalf of an attorney by having you sign an attorney representation agreement.

(c) A public adjuster cannot require you to sign a power of attorney.

(d) A public adjuster cannot require you to refuse to work with your insurer.

(e) Your insurance policy requires you to cooperate with your insurer to settle your claim

(f) IMPORTANT NOTICE: You may contact the Utah

Insurance Department to verify that the public adjuster is licensed to do business in Utah, what your rights are as a consumer, or for information about filing a complaint, by calling 801-538-3035 or toll free at 800-439-3805, or by visiting the department's website at www.insurance.utah.gov.

(g) A public adjuster may not enter into a contract with an insured and collect compensation as provided in the contract without actually performing the service customarily provided by a licensed public adjuster for the insured.

(3)(a) A public adjuster contract must contain the following compensation disclosures in a clear and prominent statement:

(i) if an hourly rate, the contract must state the hourly rate and how it will be applied to hours of service provided by the public adjuster to calculate the amount payable;

(ii) if a flat fee, the contract must state the amount that will be payable to the public adjuster;

(iii) if a percentage, the contract must state the exact percentage that will be applied to the settlement of the claim to calculate the amount payable to the public insurance adjuster; or

(iv) if another method of calculation is chosen, the contract must include a detailed explanation of how the amount payable will be determined based on service provided by the public adjuster.

(b) A public adjuster may not receive compensation in return for referring the insured to a particular attorney, appraiser, umpire, construction company, contractor, repair firm or salvage company.

(c) A public adjuster may not receive compensation for a claim if the insurer commits in writing to pay or pays the policy limits within 72 hours of the loss report.

(d) Except for direct payment of compensation by the insured, all drafts or checks must include the insured as a payee and require their written signature and endorsement. Public adjusters may not sign or endorse any payment draft or check on behalf of the insured.

(e) A public adjuster may not enter into a contract with an insured and collect compensation as provided in the contract without actually performing the service customarily provided by a licensed public adjuster for the insured.

R590-274-8. Penalties.

A person found to be in violation of this rule shall be subject to penalties as provided under Section 31A-2-308.

R590-274-9. Enforcement Date.

The commissioner will begin enforcing the revised provisions of this rule 15 days from the effective date of this rule.

R590-274-10. Severability.

If any provision of this rule or its application to any person or situation is held to be invalid, that invalidity shall not affect any other provision or application of this rule which can be given effect without the invalid provision or application, and to this end the provisions of this rule are declared to be severable.

KEY: insurance, public adjusters

August 23, 2017

**31A-26-401
31A-26-403**

R616. Labor Commission, Boiler, Elevator and Coal Mine Safety.**R616-1. Coal, Gilsonite, or other Hydrocarbon Mining Certification.****R616-1-1. Authority and Purpose.**

This rule is established pursuant to Section 40-2-401 et seq., which authorize the Labor Commission to enact rules governing the certification of individuals to work in the positions of underground mine foreman, surface mine foreman, fire boss, underground electrician or surface electrician in coal mines, gilsonite mines or other hydrocarbon mines in Utah.

R616-1-2. Definitions.

A. "Commission" means the Labor Commission created in Section 34A-1-103.

B. "Division" means the Division of Boiler, Elevator and Coal Mine Safety of the Labor Commission.

C. "Certification" means a person being judged competent and qualified by the Division for a mining position identified in Section 40-2-402 by meeting standards established by the Division and the examining panel pursuant to the requirements in Sections 40-2-401 and 402.

R616-1-3. Fees.

As required by Section 40-2-401, the Labor Commission shall establish and collect fees for certification sufficient to fund the Commission's miner certification process. The Commission's fees schedule shall be submitted to the Legislature for approval pursuant to Section 63J-1-301(2).

R616-1-4. Code of Federal Regulations.

The provisions of 30 CFR, sections 1 through 199, "Federal Underground Coal Mine Safety Standards," 11th ed., July 1, 1996, are hereby incorporated by reference.

R616-1-5. Initial Agency Action.

Division action either granting or denying an applicant's application for certification are classified as informal adjudicative actions pursuant to Section 63G-4-202 of the Utah Administrative Procedures Act and shall be adjudicated accordingly.

KEY: certification, labor, mining

May 23, 2007

Notice of Continuation April 5, 2013

34A-1-104

40-2-1 et seq.

R616. Labor Commission, Boiler, Elevator and Coal Mine Safety.**R616-2. Boiler and Pressure Vessel Rules.****R616-2-1. Authority.**

This rule is established pursuant to Title 34A, Chapter 7 for the purpose of establishing reasonable safety standards for boilers and pressure vessels to prevent exposure to risks by the public and employees.

R616-2-2. Definitions.

A. "ASME" means the American Society of Mechanical Engineers.

B. "Boiler inspector" means a person who is an employee of:

1. The Division who is authorized to inspect boilers and pressure vessels by having met nationally recognized standards of competency and having received the Commission's certificate of competency; or

2. An insurance company writing boiler and pressure vessel insurance in Utah who is deputized to inspect boilers and pressure vessels by having met nationally recognized standards of competency, receiving the Commission's certificate of competency, and having paid a certification fee.

C. "Commission" means the Labor Commission created in Section 34A-1-103.

D. "Division" means the Division of Boiler, Elevator and Coal Mine Safety of the Labor Commission.

E. "National Board" means the National Board of Boiler and Pressure Vessel Inspectors.

F. "Nonstandard" means a boiler or pressure vessel that does not bear ASME and National Board stamping and registration.

G. "Owner/user agency" means any business organization operating pressure vessels in this state that has a valid owner/user certificate from the Commission authorizing self-inspection of unfired pressure vessels by its owner/user agents, as regulated by the Commission, and for which a fee has been paid.

H. "Owner/user agent" means an employee of an owner/user agency who is authorized to inspect unfired pressure vessels by having met nationally recognized standards of competency, receiving the Commission's certificate of competency, and having paid a certification fee.

R616-2-3. Safety Codes and Rules for Boilers and Pressure Vessels.

The following safety codes and rules shall apply to all boilers and pressure vessels in Utah, except those exempted pursuant to Section 34A-7-101, and are incorporated herein by this reference in this rule.

A. ASME Boiler and Pressure Vessel Code -- 2015.

1. Section I Rules for Construction of Power Boilers.

2. Section IV Rules for Construction of Heating Boilers.

3. Section VIII Rules for Construction of Pressure Vessels.

B. Power Piping ASME B31.1 -- 2014.

C. Controls and Safety Devices for Automatically Fired Boilers ASME CSD-1-2015. Except:

1. Part CG-130(c).

D. National Board Inspection Code ANSI/NB-23 -- 2015 Part 3.

E. NFPA 85 Boiler and Combustion Systems Hazard Code 2015.

F. Recommended Administrative Boiler and Pressure Vessel Safety Rules and Regulations NB-132 Rev. 4.

G. Pressure Vessel Inspection Code: Maintenance Inspection, Rating, Repair and Alteration API 510 Tenth Edition, 2014. Except:

1. Section-8, and

2. Appendix-A.

R616-2-4. Quality Assurance for Boilers, Pressure Vessels and Power Piping.

A. Consistent with the requirements of the Commission and its predecessor agency since May 1, 1978, all boilers and pressure vessels installed on or after May 1, 1978 shall be registered with the National Board and the data plate must include the National Board number.

B. Pursuant to Section 34A-7-102(2), any boiler or pressure vessel of special design must be approved by the Division to ensure it provides a level of safety equivalent to that contemplated by the Boiler and Pressure Vessel Code of the ASME. Any such boiler or pressure vessel must thereafter be identified by a Utah identification number provided by the Division.

C. All steam piping, installed after May 1, 1978, which is external (from the boiler to the first stop valve for a single boiler and the second stop valve in a battery of two or more boilers having manhole openings) shall comply with Section 1 of the ASME Boiler and Pressure Vessel Code or ASME B31.1 Power Piping as applicable.

D. Nonstandard boilers or pressure vessels installed in Utah before July 1, 1999 may be allowed to continue in operation provided the owner can prove the equivalence of its design to the requirements of the ASME Boiler and Pressure Vessel Code. Nonstandard boilers or pressure vessels may not be relocated or moved.

E. Effective July 1, 1999, all boiler and pressure vessel repairs or alterations must be performed by an organization holding a valid Certificate of Authorization to use the "R" stamp from the National Board. Repairs to pressure relief valves shall be performed by an organization holding a valid Certificate of Authorization to use the "VR" stamp from the National Board.

R616-2-5. Code Applicability.

A. The safety codes which are applicable to a given boiler or pressure vessel installation are the latest versions of the codes in effect at the time the installation commenced.

B. If a boiler or pressure vessel is replaced, this is considered a new installation.

C. If a boiler or pressure vessel is relocated to another location or moved in its existing location, this is considered a new installation.

R616-2-6. Variances to Code Requirements.

A. In a case where the Division finds that the enforcement of any code would not materially increase the safety of employees or general public, and would work undue hardships on the owner or user, the Division may allow the owner or user a variance pursuant to Section 34A-7-102. Variances must be in writing to be effective, and can be revoked after reasonable notice is given in writing.

B. Persons who apply for a variance to a safety code requirement must present the Division with the rationale as to how their boiler or pressure vessel installation provides safety equivalent to the safety code.

C. No errors or omissions in these codes shall be construed as permitting any unsafe or unsanitary condition to exist.

R616-2-7. Boiler and Pressure Vessel Compliance Manual.

A. The Division shall develop and issue a safety code compliance manual for organizations and personnel involved in the design, installation, operation and maintenance of boilers and pressure vessels in Utah.

B. This compliance manual shall be reviewed annually for accuracy and shall be re-issued on a frequency not to exceed two years.

C. If a conflict exists between the Boiler and Pressure Vessel compliance manual and a safety code adopted in R616-

2-3, the code requirements will take precedence.

R616-2-8. Inspection of Boilers and Pressure Vessels.

A. It shall be the responsibility of the Division to make inspections of all boilers or pressure vessels operated within its jurisdiction, when deemed necessary or appropriate.

B. Boiler inspectors shall examine conditions in regards to the safety of the employees, public, machinery, ventilation, drainage, and into all other matters connected with the safety of persons using each boiler or pressure vessel, and when necessary give directions providing for the safety of persons in or about the same. For boilers or pressure vessels inspected by an inspector employed by the Division, the owner or user is required to freely permit entry, inspection, examination and inquiry, and to furnish a guide when necessary. For boilers or pressure vessels inspected by a deputy inspector employed by an insurance company, the deputy inspector's right of entry on the premises where the boiler or pressure vessel is located is subject to the agreement between the insurance company and the owner or operator of the boiler or pressure vessel. In the event an internal inspection of a boiler or pressure vessel is required the owner or user shall, at a minimum, prepare the boiler or pressure vessel by meeting the requirements of 29 CFR Part 1910.146 "Permit Required Confined Spaces" and 29 CFR Part 1910.147 "Control of Hazardous Energy (Lockout/Tagout)".

C. If the Division finds a boiler or pressure vessel complies with the safety codes and rules, the owner or user shall be issued a Certificate of Inspection and Permit to Operate.

D. If the Division finds a boiler or pressure vessel is not being operated in accordance with safety codes and rules, the owner or user shall be notified in writing of all deficiencies and shall be directed to make specific improvements or changes as are necessary to bring the boiler or pressure vessel into compliance.

E. Pursuant to Sections 34A-1-104, 34A-2-301 and 34A-7-102, if the improvements or changes to the boiler or pressure vessel are not made within a reasonable time, the boiler or pressure vessel is being operated unlawfully.

F. If the owner or user refuses to allow an inspection to be made, the boiler or pressure vessels is being operated unlawfully.

G. If the owner or user refuses to pay the required fee, the boiler or pressure vessel is being operated unlawfully.

H. If the owner or user operates a boiler or pressure vessel unlawfully, the Commission may order the boiler or pressure vessel operation to cease pursuant to Sections 34A-1-104 and 34A-7-103.

I. If, in the judgment of a boiler inspector, the lives or safety of employees or public are or may be endangered should they remain in the danger area, the boiler inspector shall direct that they be immediately withdrawn from the danger area, and the boiler or pressure vessel be removed from service until repairs have been made and the boiler or pressure vessel has been brought into compliance.

J. An owner/user agency may conduct self inspection of its own unfired pressure vessels with its own employees who are owner/user agents under procedures and frequencies established by the Division.

R616-2-9. Fees.

Fees to be charged as required by Section 34A-7-104 shall be adopted by the Labor Commission and approved by the Legislature pursuant to Section 63J-1-301(2).

R616-2-10. Notification of Installation, Revision, or Repair.

A. Before any boiler covered by this rule is installed or before major revision or repair, particularly welding, begins on a boiler or pressure vessel, the Division must be advised at least one week in advance of such installation, revision, or repair

unless emergency dictates otherwise.

B. It is recommended that a business organization review its plans for purchase and installation, or of revision or repair, of a boiler or pressure vessel well in advance with the Division to ensure meeting code requirements upon finalization.

R616-2-11. Initial Agency Action.

Issuance or denial of a Certificate of Inspection and Permit to Operate by the Division, and orders or directives to make changes or improvements by the boiler inspector are informal adjudicative actions commenced by the agency per Section 63G-4-201.

R616-2-12. Presiding Officer.

The boiler inspector is the presiding officer referred to in Section 63G-4-201. If an informal hearing is requested pursuant to R616-2-13, the Commission shall appoint the presiding officer for that hearing.

R616-2-13. Request for Informal Hearing.

Within 30 days of issuance, any aggrieved person may request an informal hearing regarding the reasonableness of a permit issuance or denial or an order to make changes or improvements. The request for hearing shall contain all information required by Sections 63G-4-201(2)(a) and 63G-4-201(3).

R616-2-14. Classification of Proceeding for Purpose of Utah Administrative Procedures Act.

Any hearing held pursuant to R616-2-13 shall be informal and pursuant to the procedural requirements of Section 63G-4-203 and any agency review of the order issued after the hearing shall be per Section 63G-4-302. An informal hearing may be converted to a formal hearing pursuant to Section 63G-4-202(3).

R616-2-15. Deputy Boiler/Pressure Vessel Inspectors.

A. Purpose -- Section 34A-7-10 of the Safety Act ("the Act"; Title 34A, Chapter 7, Part One, Utah Code Annotated) permits the Division of Boiler, Elevator and Coal Mine Safety ("the Division") to authorize qualified individuals to inspect boilers and pressure vessels as "deputy inspectors." This rule sets forth the Division's procedures and standards for authorizing deputy inspectors, monitoring their performance, and suspending or revoking such authority when appropriate.

B. Initial appointment of deputy inspectors.

1. An applicant for initial Division authorization to inspect boilers and pressure vessels as a deputy inspector must satisfy the following requirements in the order listed below:

a. A company insuring boilers and pressure vessels in Utah ("sponsoring employer" hereafter) must submit a letter to the Division certifying that:

i. the applicant is employed by the sponsoring employer; and

ii. the sponsoring employer requests the Division authorize the applicant to inspect boilers and pressure vessels insured by that employer;

b. The applicant or sponsoring employer must submit to the Division a current, valid certification from the National Board of Boiler and Pressure Vessel Certification ("National Board") that the applicant is qualified to inspect boilers and pressure vessels;

c. The applicant or sponsoring employer must submit an application fee of \$25 to the Division;

d. The applicant must complete training for deputy inspectors provided by the Division;

e. The applicant must pass an oral examination administered by the Division pertaining to boiler and pressure vessel inspection standards and processes; and

f. The applicant must pass a written, closed-book examination administered by the Division on the Division's boiler/Pressure Vessel Compliance Manual, Rules, and codes adopted;

2. Upon successful completion of the foregoing requirements, the Division will appoint the applicant as a deputy inspector and will issue credentials to that effect. The Division will also notify the sponsoring employer of the appointment.

3. Initial appointment as a deputy inspector terminates at the end of the calendar year in which such appointment is made unless a deputy inspector qualifies for reappointment under paragraph C of this rule.

C. Annual reappointment of deputy inspectors.

1. Effective January 1 of each year, the Division will renew the appointment of each deputy inspector for an additional year if the inspector satisfies the following requirements:

a. The individual was authorized to serve as a deputy inspector as of December 31 of the previous year;

b. A sponsoring employer has submitted a letter to the Division certifying that:

i. the individual is employed by the sponsoring employer; and

ii. The sponsoring employer requests the Division to reappoint that individual as a deputy inspector to inspect boilers and pressure vessels for that employer;

c. The individual or sponsoring employer has submitted to the Division a current, valid certification from the National Board establishing that the individual is qualified as a boiler and pressure vessel inspector;

d. The individual or sponsoring employer has submitted to the Division the required renewal fee of \$20;

e. The individual has completed the Division's required training for deputy inspectors.

2. An individual who does not meet each of the foregoing requirements is not eligible for reappointment as a deputy inspector and must instead meet each of the requirements for initial appointment under paragraph B of this rule.

D. Lapse, change of employment and loss of National Board certification.

1. Lapse. An individual's appointment as a deputy inspector will lapse if the individual:

a. Does not renew the appointment by satisfying the requirements of paragraph C of this rule;

b. Does not perform and submit to the Division at least one boiler or pressure vessel inspection during the previous calendar year; or

c. Fails to inform the Division of any change in status of employment with his or her sponsoring employer as required in the following paragraph D.2. of this rule.

2. Change in employment.

a. A deputy inspector must immediately notify the Division in writing of any change in the status of the inspector's employment with his or her sponsoring employer.

b. If the Division determines that an individual previously appointed as a deputy inspector is no longer employed by a company authorized to insure boilers and pressure vessels in Utah, the Division will immediately revoke that individual's appointment.

c. If the Division determines that a deputy inspector has changed employment to another company that insures boilers and pressure vessels in Utah, the Division will require the new employer or deputy inspector to submit the following:

i. A letter from the new employer:

AA. certifying that the individual is employed by that sponsoring employer; and

BB. requesting that the individual's appointment as a deputy inspector be continued;

ii. A current, valid certification as a boiler/pressure vessel

inspector from the National Board; and

iii. Payment to the Division of the required fee of \$20.

3. National Board Certification.

a. Every deputy inspector shall at all times hold a current valid certification as a boiler/pressure vessel inspector from the National Board.

b. Each deputy inspector shall immediately notify the Division if his or her National Board certification has been revoked or suspended.

c. If the Division has reason to believe that a deputy inspector's National Board certification has been revoked or suspended, the Division will obtain written verification from the National Board. IF the National Board has in fact revoked or suspended the deputy inspector's certification, the Division will revoke the inspector's appointment as a deputy inspector.

E. Scope of authority. Appointment as a deputy inspector has the limited effect of authorizing the deputy inspector to inspect boilers and pressure vessels insured by his or her sponsoring employer for compliance with engineering codes and other standards adopted by the Division in Utah Administrative Code Rule R616-2. The Division expressly does not confer any other authority to deputy inspectors. Deputy inspectors remain employees of their respective sponsoring employers and are not employees of the Division or agents of the Division for any other purpose. A deputy inspector's right to inspect any particular boiler or pressure vessel, including the deputy inspector's right of entry on the premises where the boiler or pressure vessel is located, is subject to the agreement between the sponsoring employers and the owner or operator of the boiler or pressure vessel. Appointment as a deputy inspector by the Division does not confer any right of entry independent from the terms of such agreement.

F. Inspection Standards

1. In inspecting any boiler or pressure vessel, a deputy inspector shall apply the standards and engineering codes adopted in Utah Administrative Code R616-2 - Boiler and Pressure Vessel Rules.

2. Each deputy inspector must use the Division's web-based applications to accurately record and submit all information regarding boilers and pressure vessels, including:

a. inspection reports;

b. scrapped and inactive items;

c. information changes other than those requiring submission of a Change of Insurance Status Form (NB4); and

d. a Web Issue Form (Form WIF-01) to identify any error or other issue resulting from the deputy inspector's use of the Division's web-based applications.

G. Quality Control. The Division will evaluate the performance of each deputy inspector to assure compliance with the Division's standards for boiler and pressure vessel inspections.

1. The Division's Business Analyst will review each inspection report submitted by a deputy inspector and will report any serious errors to the Chief Boiler and Pressure Vessel Inspector ("Chief Inspector") for appropriate action.

2. Each year, the Chief Inspector will evaluate a sample of each deputy inspector's inspections performed during that year for compliance with Division standards.

3. In addition to the reviews undertaken pursuant to paragraph G.2. of this rule, the Chief Inspector will also investigate any observation or report of an inspection deficiency to determine whether the deputy inspector complied with Division standards and rules in performing and reporting the inspection.

H. Corrective Action, Revocation and Right to Hearing.

1. If the Chief Inspector concludes that a deputy inspector does not satisfy requirements of this rule for continued appointment as a deputy inspector or has performed an inspection in a manner that is inconsistent with Division

standards, the Chief Inspector will submit a written report and may recommend corrective action to the Division Director.

2. Depending on the circumstances and the seriousness of the situation, corrective action may include;

- a. warning letter;
- b. requirements for additional training;
- c. requirements for retesting;
- d. request review by the National Board;
- e. additional supervision; and
- f. revocation of appointment as a deputy inspector.

3. The Division Director shall forward a copy of the Chief Inspector's written report and any recommendation for corrective action to the deputy inspector and the sponsoring employer. If the deputy inspector or sponsoring employer dispute the report or recommended corrective action, the Division Director shall schedule time and place to conduct a hearing on the matter, such hearing to be conducted as an informal adjudicative proceeding under the Utah Administrative Procedures Act. After conducting such hearing, the Division Director will issue a written decision setting forth the material facts and ordering appropriate corrective action, if any. The Division Director shall forward a copy of the decision to the deputy inspector, sponsoring employer, and the National Board.

4. If the deputy inspector or sponsoring employer is dissatisfied with the Division Director's decision, the inspector or sponsoring employer may seek judicial review as provided by the Utah Administrative Procedures Act.

KEY: boilers, certification, safety

July 1, 2016

34A-7-101 et seq.

Notice of Continuation August 23, 2016

R616. Labor Commission, Boiler, Elevator and Coal Mine Safety.**R616-3. Elevator Rules.****R616-3-1. Authority.**

This rule is established pursuant to Section 34A-7-201 for the purpose of the Labor Commission ascertaining, fixing, and enforcing reasonable standards regarding elevators for the protection of life, health, and safety of the general public and employees.

R616-3-2. Definitions.

A. "ANSI" means the American National Standards Institute, Inc.

B. "ASME" means the American Society of Mechanical Engineers.

C. "Commission" means the Labor Commission created in Section 34A-1-103.

D. "Division" means the Division of Boiler, Elevator and Coal Mine Safety of the Labor Commission.

E. "Elevator" means a hoisting and lowering mechanism equipped with a car or platform and that moves in guides in a substantially vertical direction.

F. "Escalator" means a stairway, moving walkway, or runway that is power driven, continuous and used to transport one or more individuals.

R616-3-3. Safety Codes for Elevators.

The following safety codes are adopted and incorporated by reference within this rule:

A. ASME A17.1-2013/CSA B44-10, Safety Code for Elevators and Escalators, and amended as follows:

1. Delete 2.2.2.5;

2. Amend 8.6.5.8 as follows: Existing hydraulic cylinders installed below ground when found to be leaking shall be replaced with cylinders conforming to 3.18.3.4 or the car shall be provided with safeties conforming to 3.17.1 and guide rails, guide rail supports and fastenings conforming to 3.23.1. This code is issued every two years. New issues become mandatory only when a formal change is made to these rules. Elevators are required to comply with the A17.1 code in effect at the time of installation.

B. ASME A17.3 - 2015 Safety Code for Existing Elevators and Escalators. This code is adopted for regulatory guidance only for elevators classified as remodeled elevators by the Division of Boiler, Elevator and Coal Mine Safety.

C. ASME A90.1-2015, Safety Standard for Belt Manlifts.

D. ANSI A10.4-2016, Safety Requirements for Personnel Hoists and Employee Elevators for Construction and Demolition Operations.

E. ICC/ANSI A117.1 (2009) Accessible and Usable Buildings and Facilities, sections 407 and 408, and 410 approved October 20, 2010.

F. ASME A18.1-2014 Safety Standard For Platform Lifts And Stairway Chairlifts.

G. ASME A17.6-2010 Standard for Elevator Suspension, Compensation, and Governor Systems.

R616-3-4. Inspector Qualification.

A. Any person who performs elevator safety inspections must have a current certification as a Qualified Elevator Inspector as outlined in ASME QEI-1, Qualifications for Elevator Inspectors.

R616-3-5. Modifications and Variances to Codes.

A. In a case where the Division finds that the enforcement of any code would not materially increase the safety of employees or general public, and would work undue hardships on the owner/user, the Division may allow the owner/user a variance. Variances must be in writing to be effective and can

be revoked after reasonable notice is given in writing.

B. Persons who apply for a variance to a safety code requirement must present the Division with the rationale as to how their elevator installation provides safety equivalent to the applicable safety code.

C. No errors or omissions in these codes shall be construed as permitting any unsafe or unsanitary condition to exist.

D. The Commission may, by rule, add or delete from the applicable safety codes for any good and sufficient safety reason.

E. In the event that adopted safety codes are in conflict with one another, the ASME A17.1, Safety Code for Elevators and Escalators will take precedence. The exception to this is for compliance with the accessibility guidelines of Pub. L. No. 101-336 "The Americans with Disability Act of 1990". In this instance, the International Building Code standards adopted in R616-3-3 for accessibility as applied to elevators take precedence over ASME A17.1.

R616-3-6. Exemptions.

A. These rules apply to all elevators in Utah with the following exemptions:

1. Private residence elevators installed inside a single family dwelling. Common elevators which serve multiple private residences are not exempt from these rules.

2. Elevators in buildings owned by the Federal government.

B. Owners of elevators exempted in R616-3-6.A. may request a safety inspection by Division of Boiler, Elevator and Coal Mine Safety inspectors. Code non-compliance items will be treated as recommendations by the inspector with the owner having the option as to which, if any, are corrected. Owners requesting these inspections will be invoiced at the special inspection rate. If the owner requests a State of Utah Certificate to Operate for the elevator, all of the recommendations must be completed to the satisfaction of the inspector and the owner will be invoiced the appropriate certificate fee.

R616-3-7. Inspection of Elevators, Permit to Operate, Unlawful Operations.

A. It shall be the responsibility of the Division to make inspections of all elevators when deemed necessary or appropriate.

B. Elevator inspectors shall examine conditions in regards to the safety of the employees, public, machinery, drainage, methods of lighting, and into all other matters connected with the safety of persons using or in close proximity to each elevator, and when necessary give directions providing for the better health and safety of persons in or about the same. The owner/user is required to freely permit entry, inspection, examination and inquiry, and to furnish a guide when necessary.

C. If the Division finds that an elevator complies with the applicable safety codes and rules, the owner/user shall be issued a Certificate of Inspection and Permit to Operate.

1. The Certificate of Inspection and Permit to Operate is valid for 24 months.

2. The Certificate of Inspection and Permit to Operate shall be displayed in a conspicuous location for the entire validation period. If the certificate is displayed where accessible to the general public, as opposed to being in the elevator machine room, it must be protected under a transparent cover.

D. If the Division finds an elevator is not being operated in accordance with the safety codes and rules, the owner/user shall be notified in writing of all deficiencies and shall be directed to make specific improvements or changes as are necessary to bring the elevator into compliance.

E. Pursuant to Section 34A-7-204, if the improvements or changes are not made within a reasonable time, by agreement of

the division and the owner, the elevator is being operated unlawfully.

F. If the owner/user refuses to allow an inspection to be made, the elevator is being operated unlawfully.

G. If the owner/user refuses to pay the required fee, the elevator is being operated unlawfully.

H. If the owner/user operates an elevator unlawfully, the Commission may order the elevator operation to cease pursuant to Section 34A-1-104.

I. If, in the judgment of an elevator inspector, the lives or safety of employees or public are, or may be, endangered should they remain in the danger area, the elevator inspector shall direct that they be immediately withdrawn from the danger area, and the elevator removed from service until repairs have been made and the elevator has been brought into compliance.

R616-3-8. Inclined Wheelchair Lift Headroom Clearance.

A. Headroom clearance for inclined wheelchair lifts throughout the range of travel shall be not less than 80 inches (2032 mm) as measured vertically from the leading edge of the platform floor.

B. For existing facilities only, in the event that it is not technically or economically feasible to provide other means of access for disabled persons, inclined wheelchair lifts may be installed if all of the following conditions are met:

1. The appropriate building inspection jurisdiction approves the use of an inclined wheelchair lift for the specific application.

2. Headroom clearance throughout the range of travel shall be not less than 60 inches as measured vertically from the leading edge of the platform floor.

3. The passenger restriction sign as required by ASME A18.1 3.1.2.3 shall be amended as follows: "PHYSICALLY DISABLED PERSONS ONLY. NO FREIGHT. HEADROOM CLEARANCE IS LIMITED. USE ONLY IN THE SITTING POSITION".

R616-3-9. Valves in Hydraulic Elevator Operating Fluid Systems.

A. Due to the potential loss of pressure retaining capability when over torqued, bronze-bodied valves shall not be installed in the hydraulic systems of a hydraulic elevator.

B. This requirement is in effect for all new installations and remodel installations involving the hydraulic system.

C. If a bronze-bodied valve installed on an existing elevator begins to leak, that valve shall be replaced by a steel-bodied valve.

R616-3-10. Hydraulic Elevator Piping.

A. This rule establishes minimum standards for hydraulic fluid piping in hydraulic elevators. The piping specifications referred to in this rule are governed by ASME or ASTM piping specifications (e.g. ASME Specification SA-53 Table X2.4).

B. Hydraulic elevators not incorporating a safety valve may use schedule 40 piping.

C. For newly installed hydraulic elevators that do incorporate a safety valve:

1. Where piping is protected by the safety valve, schedule 40 piping may be used;

2. Where grooved or threaded connections are used in piping that is unprotected by the safety valve, i.e. between the safety valve and the hydraulic jack(s), nominal pipe size (NPS)3 or schedule 80 piping may be used;

3. Where piping is unprotected by the safety valve, but welded or bolted flange connections are used, schedule 40 piping may be used.

R616-3-11. Shunt Trips in Elevator Systems.

A. The means (shunt trip) to automatically disconnect the

main line power supply to the elevator discussed in 2.8.2.3.2 of A17.1 is not required for hydraulic elevators with a rise of 50 feet or less.

R616-3-12. Hoistway Vents.

Hoistway ventilation as outlined in the International Building Code is under the jurisdiction of the local building official.

R616-3-13. Hand Line Control Elevators.

A. Operation of a hand line control elevator is not permitted.

B. Owners of hand line control elevators are required to render the elevator electrically and mechanically incapable of operation.

R616-3-14. Remodeled Elevators.

A. When an elevator is classified as a remodeled (modernized) elevator by the Division, the components of the elevator involved in the modernization must comply with the standards of the latest version of A17.1 and A17.3 in effect at the time the remodeling of the elevator commences.

B. When a hydraulic elevator has been remodeled it is considered a new installation.

R616-3-15. Fees.

A. Fees to be charged as provided by Section 34A-1-106 and 63J-1-303 shall be adopted by the Labor Commission and approved by the Legislature pursuant to Section 63J-1-301(2).

B. The fee for the initial certification permit shall be invoiced to and paid by the company or firm installing the elevator.

C. The renewal certification permit shall be invoiced to and paid by the owner/user.

D. Any request for a special inspection shall be invoiced to and paid by the person/company requesting the inspection, at the hourly rate plus mileage and expenses.

R616-3-16. Notification of Installation, Revision or Remodeling.

A. Before any elevator covered by this rule is installed or a major revision or remodeling begins on the elevator, the Division must be advised at least one week in advance of such installation, revision, or remodeling unless emergency dictates otherwise.

R616-3-17. Initial Agency Action.

Issuance or denial of a Certificate of Inspection and Permit to Operate by the Division, and orders or directives to make changes or improvements by the elevator inspector are informal adjudicative actions commenced by the agency per Section 63G-4-201.

R616-3-18. Presiding Officer.

The elevator inspector is the presiding officer referred to in Section 63G-4-201. If an informal hearing is requested pursuant to R616-3-18, the Commission shall appoint the presiding officer for that hearing.

R616-3-19. Request for Informal Hearing.

Within 30 days of issuance, any aggrieved person may request an informal hearing regarding the reasonableness of a permit issuance or denial or an order to make changes or improvements. The request for hearing shall contain all information required by Sections 63G-4-201(3)(a) and 63G-4-201(3)(b).

R616-3-20. Classification of Proceeding for Purpose of Utah Administrative Procedures Act.

Any hearing held pursuant to R616-3-18 shall be informal and pursuant to the procedural requirements of Section 63G-4-203 and any agency review of the order issued after the hearing shall be per Section 63G-4-302. An informal hearing may be converted to a formal hearing pursuant to Subsection 63G-4-202(3).

KEY: elevators, certification, safety
July 1, 2016 **34A-1-101 et seq.**
Notice of Continuation August 23, 2016

R616. Labor Commission, Boiler, Elevator and Coal Mine Safety.**R616-4. Coal Mine Safety.****R616-4-1. Authority and Purpose.**

This rule is established pursuant to authority granted the Commission by 40-2-104 and 40-2-301(2) for the purpose of improving coal mine safety, preventing coal mine accidents, and improving coal mine accident response consistent with the Coal Mine Safety Act.

R616-4-2. Definitions.

As used in this rule, the terms listed below shall have the same definition as set forth in the Coal Mine Safety Act, as follows.

(1) "Adverse action" means to take any of the following actions against a person in a manner that affects the person's employment or contractual relationships:

- (a) discharge the person;
- (b) threaten the person;
- (c) coerce the person;
- (d) intimidate the person; or
- (e) discriminate against the person, including to discriminate in:
 - (i) compensation;
 - (ii) terms;
 - (iii) conditions;
 - (iv) location;
 - (v) rights;
 - (vi) immunities;
 - (vii) promotions; or
 - (viii) privileges.

(2) "Coal mine" means:

(a) the following used in extracting coal from its natural deposits in the earth by any means or method:

- (i) the land;
- (ii) a structure;
- (iii) a facility;
- (iv) machinery;
- (v) a tool;
- (vi) equipment;
- (vii) a shaft;
- (viii) a slope;
- (ix) a tunnel;
- (x) an excavation; and
- (xi) other property; and

(b) the work of preparing extracted coal, including a coal preparation facility.

(3) "Commission" means the Labor Commission created in 34A-1-103.

(4) "Commissioner" means the commissioner appointed under 34A-1-201.

(5) "Council" means the Mine Safety Technical Advisory Council created in 40-2-203.

(6) "Director" means the Director of the Utah Office of Coal Mine Safety appointed under 40-2-202.

(7) "Major coal mine accident" means any of the following (but not limited to) at a coal mine located in Utah:

- (a) a mine explosion;
- (b) a mine fire;
- (c) the flooding of a mine;
- (d) a mine collapse; or
- (e) the accidental death of an individual at a mine.

(8) "Mine Safety and Health Administration" and "MSHA" means the federal Mine Safety and Health Administration within the United States Department of Labor.

(9) "Office" means the Utah Office of Coal Mine Safety created in 40-2-201.

(10) "Unsafe condition" means a danger that reasonably could be expected to cause serious harm to a person or property.

R616-4-3. Examining Coal Mines.

(1) Pursuant to 34A-1-406 and other provisions of Utah Law, representatives of the Utah Labor Commission are authorized to enter places of employment, including coal mines, for purposes of "examining the provisions made for the health and safety of the employees in the place of employment."

(2) If the Director of the Office of Coal Mine Safety determines that the safety of an employee is or will be endangered by activities or conditions in a coal mine, the Director may:

(a) notify the employee and mine management of the danger and specify actions necessary to remedy the danger;

(b) notify the Mine Safety and Health Administration of the danger;

(c) notify other appropriate federal, state, and local government agencies; and

(d) take such other action as authorized by law to eliminate or mitigate the danger.

R616-4-4. Accident Notification Requirements.

(1) After the occurrence of any coal mine accident that is required by MSHA or regulations 30 CFR Part 50 to be immediately reported to MSHA, a coal mine operator shall first notify MSHA of the accident. Immediately after completing its report to MSHA, the coal mine operator shall then report the accident to the Office of Coal Mine Safety at telephone number 1-888-988-6463.

R616-4-5. Emergency Response Training.

(1) Beginning with the 2010 calendar year, each coal mine operator shall annually hold an in-person meeting with law enforcement, public safety and health care providers for the purpose of reviewing and refining coal mine emergency response plans. The Office of Coal Mine Safety shall be notified of and arrange to participate in each such meeting, but the inability of the Office or any local, state, and federal emergency response personnel to attend such a meeting shall not prevent the operator from proceeding with the meeting as scheduled.

KEY: coal mines, safety**March 11, 2010****Notice of Continuation February 12, 2015****40-2-104****40-2-301(2)**

R628. Money Management Council, Administration.

R628-4. Bonding of Public Treasurers.

R628-4-1. Authority.

This rule is issued pursuant to Section 51-7-15.

R628-4-2. Fidelity Bond or Crime Insurance.

A. Every public treasurer shall secure a fidelity bond or crime insurance in the amount shown in R628-4-4. Bonds must be issued by a corporate surety licensed to do business in the state of Utah and having a current A.M. Best Rating of "A" or better.

1. Crime insurance must be issued by:

- a) an insurer licensed to do business in the state of Utah and having a current A.M. Best Rating of "A" or better; or
- b) an interlocal agency created under Section 11-13-101 operating as a joint self-insurance fund. A joint self-insurance fund providing crime coverage under this section must maintain a restricted account in the PTIF equal to 50% of the per occurrence limit of coverage.

B. Bonds should be effective as of the date the treasurer assumes the duties of the office or is sworn in.

R628-4-3. Budgeted Gross Revenue.

The basis used shall be the budgeted gross revenue for the previous accounting year. Budgeted gross revenue includes all funds collected or handled by the public treasurer. For purposes of this rule, taxes, fees, service charges, interest, proceeds from sale of assets, and borrowing proceeds are examples of revenue categories which are considered.

R628-4-4. Amount of Bond or Crime Insurance.

TABLE

Budget	Percent for Bond
\$ 0 to \$ 10,000	n/a but not less than \$ 0
10,001 to 100,000	9% but not less than 5,000
100,001 to 500,000	8% but not less than 9,000
500,001 to 1,000,000	7% but not less than 40,000
1,000,001 to 5,000,000	6% but not less than 70,000
5,000,001 to 10,000,000	5% but not less than 300,000
10,000,001 to 25,000,000	4% but not less than 500,000
25,000,001 to 50,000,000	3% but not less than 1,000,000
50,000,001 to 500,000,000	2% but not less than 1,500,000
over 500,000,000	not less than 10,000,000

KEY: bonding requirements, public treasurers, accounts, state and local affairs

August 21, 2017

51-7-15

Notice of Continuation October 5, 2015

R628. Money Management Council, Administration.

R628-15. Certification as an Investment Adviser.

R628-15-1. Authority.

This rule is issued pursuant to Sections 51-7-3(3), 51-7-18(2)(b)(vi) and (vii), and 51-7-11.5.

R628-15-2. Scope.

This rule establishes the criteria applicable to all investment advisers and investment adviser representatives for certification by the Director as eligible to provide advisory services to public treasurers under the State Money Management Act (the "Act"). It further establishes the application contents and procedures, and the criteria and the procedures for denial, suspension, termination and reinstatement of certification.

R628-15-3. Purpose.

This rule establishes a uniform standard to evaluate the financial condition and the standing of an investment adviser to determine if investment of public funds by investment advisers would expose said public funds to undue risk.

R628-15-4. Definitions.

A. The following terms are defined in Section 51-7-3 of the Act, and when used in this rule, have the same meaning as in the Act:

1. "Certified investment adviser";
2. "Council";
3. "Director";
4. "Public treasurer";
5. "Investment adviser representative"; and
6. "Certified dealer".

B. For purposes of this rule the following terms are defined:

1. "Investment adviser" means either a federal covered adviser as defined in Section 61-1-13 or an investment adviser as defined in Section 61-1-13.

2. "Realized rate of return" means yield calculated by combining interest earned, discounts accreted and premiums amortized, plus any gains or losses realized during the month, less all fees, divided by the average daily balance during the reporting period. The realized return should then be annualized.

3. "Soft dollar" means the value of research services and other benefits, whether tangible or intangible, provided to a certified investment adviser in exchange for the certified investment adviser's business.

4. "Approved list of brokers and dealers" means broker-dealers approved by a certified investment adviser to transact business on a public treasurer's account regardless of status as a certified dealer.

R628-15-5. General Rule.

Before an investment adviser or investment adviser representative provides investment advisory services to any public treasurer, the investment adviser or investment adviser representative must submit and receive approval of an application to the Division, pay to the Division a non-refundable fee as described in Section 51-7-18.4(2), and become a Certified investment adviser or Investment adviser representative under the Act.

R628-15-6. Criteria for Certification of an Investment Adviser.

To be certified by the Director as a Certified investment adviser or Investment adviser representative under the Act, an investment adviser or investment adviser representative shall:

A. Submit an application to the Division on Form 628-15 clearly designating:

- (1) the investment adviser;
- (2) its designated official as defined in R164-4-2 of the

Division; and

(3) any investment adviser representative who provides investment advisory services to public treasurers in the state.

B. Provide written evidence of insurance coverage as follows:

- (1) fidelity coverage based on the following schedule:

Utah Public funds under management	Percent for Bond
\$0 to \$25,000,000	10% but not less than \$1,000,000
\$25,000,001 to \$50,000,000	8% but not less than \$2,500,000
\$50,000,001 to \$100,000,000	7% but not less than \$4,000,000
\$100,000,001 to \$500,000,000	5% but not less than \$7,000,000
\$500,000,001 to \$1.250 billion	4% but not less than \$25,000,000
\$1,250,000,001 and higher	Not less than \$50,000,000

(2) errors and omissions coverage equal to five percent (5%) of Utah public funds under management, but not less than \$1,000,000 nor more than \$10,000,000 per occurrence.

C. Provide to the Division at the time of application or renewal of application, its most recent annual audited financial statements prepared by an independent certified public accountant in accordance with generally accepted accounting principles in accordance with R628-15-8A.

D. Pay to the Division the non-refundable fee described in Section 51-7-18.4(2).

E. Have a current Certificate of Good Standing dated within 30 days of application from the state in which the applicant is incorporated or organized.

F. Have net worth as of its most recent fiscal year-end of not less than \$150,000 documented by the financial statements audited according to Subsection R628-15-6(C).

G. Allow the public treasurer to select the forum and method for dispute resolution, whether that forum be arbitration, mediation or litigation in any state or federal court. No agreement, contract, or other document that the applicant requires or intends to require to be signed by the public treasurer to establish an investment advisory relationship shall require or propose to require that any dispute between the applicant and the public treasurer must be submitted to arbitration.

H. Agree to the jurisdiction of the Courts of the State of Utah and applicability of Utah law, where relevant, for litigation of any dispute arising out of transactions between the applicant and the public treasurer.

I. All Investment adviser representatives who have any contact with a public treasurer or its account, must sign and have notarized a statement that the representative:

(1) is familiar with the authorized investments as set forth in the Act and the rules of the Council;

(2) is familiar with the investment objectives of the public treasurer, as set forth in Section 51-7-17(2);

(3) acknowledges, understands, and agrees that all investment transactions conducted for the benefit of the public treasurer must fully comply with all requirements set forth in Section 51-7-7 and that the Certified investment adviser and any Investment adviser representative is prohibited from receiving custody of any public funds or investment securities at any time.

R628-15-7. Use of an Adviser's Approved List of Broker-

Dealers.

If an investment adviser intends to use their own approved list of brokers-dealers, those broker-dealers on the adviser's approved list must qualify under SEC Rule 15C3-1 or other applicable regulatory requirements.

R628-15-8. Certification.

A. The initial application for certification must be received on or before the last day of the month for approval at the following month's Council meeting.

B. All certifications shall be effective upon acceptance by the Council.

C. All certifications not otherwise terminated shall expire on June 30 of each year, unless renewed.

R628-15-9. Renewal of Application.

A. Certified investment advisers shall apply annually, on or before April 30 of each year, for certification to be effective July 1 of each year.

B. The application must contain all of the documents and meet all of the requirements as set forth above with respect to initial applications.

C. The application must be accompanied by an annual certification fee as described in Section 51-7-18.4(2).

D. A Certified investment adviser whose certification has expired as of June 30 may not function as a Certified investment adviser until the investment adviser's certification is renewed.

R628-15-10. Post Certification Requirements.

A. Certified investment advisers shall notify the Division of any changes to any items or information contained in the original application within 30 calendar days of the change. The notification shall provide copies, where necessary, of relevant documents.

B. Certified investment advisers shall maintain a current application on Form 628-15 with the Division throughout the term of any agreement or contract with any public treasurer. Federal covered advisers shall maintain registration as an investment adviser under the Investment Advisers Act of 1940 throughout the term of any agreement or contract with any public treasurer.

C. Certified investment advisers shall provide and maintain written evidence of insurance coverage as described in R628-15-6(B).

D. Certified investment advisers shall provide to the public treasurer the SEC Form ADV Part II prior to contract execution.

E. Certified investment advisers shall file annual audited financial statements with all public treasurers with whom they are doing business.

F. Certified investment advisers shall fully disclose all conflicts of interest and all economic interests in dealers and other affiliates, consultants and experts used by the Investment adviser in providing investment advisory services.

G. Certified investment advisers shall act with the degree of care, skill, prudence, and diligence that a person having special skills or expertise acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims.

H. Certified investment advisers shall use their approved list of broker-dealers or certified dealers in the best interest of the public treasurer's account for which they are transacting business when allocating transactions to broker-dealers.

I. Any value from transacting on a public treasurer's account accrued to the investment adviser, including soft dollar credits, for allocating transactions to broker-dealers must be paid back to the public treasurer's account. In addition, Certified investment advisers shall fully disclose to the public treasurer any self-dealing with subsidiaries, affiliates or partners of the Investment adviser and any soft dollar benefits to the

Investment adviser for transactions placed on behalf of the public treasurer.

J. Certified investment advisers shall fully and completely disclose to all public treasurers with whom they do business the basis for calculation of fees, whether and how fees may be adjusted during the term of any agreement, and any other costs chargeable to the account. If performance-based fees are proposed, the disclosure shall include a clear explanation of the amount of the fee at specific levels of performance and how prior losses are handled in calculation of the performance-based fee.

K. Certified investment advisers shall not assign any contract or agreement with a public treasurer without the written consent of the public treasurer.

L. Certified investment advisers shall provide immediate written notification to any public treasurer to whom advisory services are provided and to the Division upon conviction of any crime involving breach of trust or fiduciary duty or securities law violations.

M. Not less than once each calendar quarter and as often as requested by the public treasurer, Certified investment advisers shall timely deliver to the public treasurer:

(1) copies of all trade confirmations for transactions in the account;

(2) a summary of all transactions completed during the reporting period;

(3) a listing of all securities in the portfolio at the end of each reporting period, the market value and cost of each security, and the credit rating of each security;

(4) performance reports for each reporting period showing the total return on the portfolio as well as the realized rate of return, when applicable, and the net return after calculation of all fees and charges permitted by the agreement; and

(5) a statistical analysis showing the portfolio's weighted average maturity and duration, if applicable, as of the end of each reporting period.

R628-15-11. Notification of Certification.

The Director shall provide a list of Certified investment advisers and Investment adviser representatives to the Council at least semiannually. The Council shall mail this list to each public treasurer.

R628-15-12. Grounds for Denial, Suspension or Termination of Status as a Certified Investment Adviser.

Any of the following constitutes grounds for denial, suspension, or termination of status as a Certified investment adviser:

A. Denial, suspension or termination of the Certified investment adviser's license by the Division.

B. Failure to maintain a license with the Division by the firm or any of its Investment adviser representatives conducting investment transactions with a public treasurer.

C. Failure to maintain the required minimum net worth and the required bond.

D. Requiring the public treasurer to sign any documents, contracts, or agreements which require that disputes be submitted to mandatory arbitration.

E. Failure to pay the annual certification fee.

F. Making any false statement or filing any false report with the Division.

G. Failure to comply with any requirement of section R628-15-9.

H. Engaging in any material act in negligent or willful violation of the Act or Rules of the Council.

I. Failure to respond to requests for information from the Division or the Council within 15 days after receipt of a request for information.

J. Engaging in a dishonest or unethical practice.

"Dishonest or unethical practice" includes but is not limited to those acts and practices enumerated in Rule R164-6-1g.

K. Being the subject of:

(1) an adjudication or determination, within the past five years by a securities or commodities agency or administrator of another state, Canadian province or territory, or a court of competent jurisdiction that the person has willfully violated the Securities Act of 1933, the Securities Exchange Act of 1934, the Investment Advisers Act of 1940, the Investment Company Act of 1940, the Commodity Exchange Act, or the securities or commodities law of any other state; or

(2) an order entered within the past five years by the securities administrator of any state or Canadian province or territory or by the Securities and Exchange Commission denying or revoking license as an investment adviser, or investment adviser representative or the substantial equivalent of those terms or is the subject of an order of the Securities and Exchange Commission suspending or expelling the person from a national securities exchange or national securities association registered under the Securities Exchange Act of 1934, or is the subject of a United States post office fraud order.

August 21, 2017

51-7-3(3)
51-7-18(2)(b)(vi)
51-7-18(2)(b)(vii)
51-7-11.5(2)(b)
51-7-11.5(2)©

R628-15-13. Procedures for Denial, Suspension, or Termination and Reinstatement of Status.

A. Where it appears to the Division or to the Council that grounds may exist to deny, suspend, or terminate status as a Certified investment adviser, the Council shall proceed under the Utah Administrative Procedures Act, Chapter 4, Title 63G ("UAPA").

B. All proceedings to suspend a Certified investment adviser or to terminate status as a certified investment adviser are designated as informal proceedings under ("UAPA").

C. In any hearings held, the Chair of the Council shall be the presiding officer, and that person may act as the hearing officer, or may designate another person from the Council or the Division to be the hearing officer. After the close of the hearing, other members of the Council may make recommendations to the hearing officer.

D. The Notice of Agency Action as set forth under UAPA, or any petition filed in connection with it, shall include a statement of the grounds for suspension or termination, and the remedies required to cure the violation.

E. A Certified investment adviser and its Investment adviser representative who has received a Notice of Agency Action alleging violations of the Act or these rules, may continue, in the discretion of the public treasurer, to conduct investment transactions with the public treasurer until the violations asserted by the Money Management Council in the Notice of Agency Action becomes subject to a written order of the Council or Agency against the adviser or adviser representative, or until the Council enters an emergency order indicating that public funds will be jeopardized by continuing investment transactions with the adviser or adviser representative.

F. The Council may issue an emergency order to cease and desist operations or specified actions with respect to public treasurers or public funds. Further, the Council may issue an emergency suspension of certification if the Council determines that public funds will be jeopardized by continuing investment transactions or other specified actions with the adviser or adviser representative.

G. Within ten business days after the conclusion of a hearing on an emergency order, the Council shall lift this prohibition upon a finding that the Certified investment adviser and its investment adviser representative may maintain certification.

KEY: cash management, public investments, securities regulations, investment advisers

R651. Natural Resources, Parks and Recreation.

R651-227. Boating Safety Course Fees.

R651-227-1. Boating Safety Course Fees.

(1) The fee for the Division's personal watercraft education course is \$12.

(2) The fee to replace a lost or stolen Boating Education Certificate is \$5.00.

(3) The fee for issuance of a state issued Boating Education Certificate is \$5.00.

KEY: boating, safety, course, fee

July 23, 2012

73-18-15(7)(a)

Notice of Continuation August 28, 2017

R652. Natural Resources; Forestry, Fire and State Lands.**R652-121. Wildland Fire Suppression Fund.****R652-121-100. Authority.**

This rule implements Article XVIII of the Utah Constitution and Section 65A-8-204 and provides for administration of the Wildland Fire Suppression Fund under the authority of Section 65A-8-207.

R652-121-200. Wildland Suppression Fund.

1. The Wildland Fire Suppression Fund may be used to pay the costs of wildland fire suppression on state-owned land and for wildland fire suppression costs except initial attack costs on non-federal land within the jurisdiction of a county, municipality, or other eligible entity that has entered into a cooperative agreement with the Division and is complying with the terms of the cooperative agreement.

2. A county, municipality, or other eligible entity without a cooperative agreement or one with a revoked cooperative agreement shall be responsible to pay for all wildland fire suppression costs on non-federal land within its jurisdiction within 90 days after receiving a bill from the Division for such costs, subject to a right to an informal appeal to the State Forester. Any appeal must be submitted to the Division in writing within 90 days of receiving the bill. The State Forester may conduct an investigation, hold an informal hearing, or request additional information before making a final decision.

R652-121-300. Payment of Wildland Fire Suppression Fund Costs.

1. After an eligible entity has entered into a cooperative agreement with the Division, all wildland fire suppression costs beyond initial attack within the jurisdiction of the eligible entity will be paid by the Wildland Fire Suppression Fund.

2. Area managers will verify to the state forester in writing that an eligible entity has a cooperative agreement.

3. Each participating entity must make a good faith effort to recover suppression costs for negligently-caused wildland fires. If the participating eligible entity refuses to make a good faith effort to recover suppression costs from a negligent party for a wildland fire without approval from the State Forester, the suppression costs for that fire shall not be eligible for payment from the Wildland Fire Suppression Fund. The State Forester will determine if a good faith effort has been made to recover suppression cost.

4. Wildland fire suppression costs recovered under Section 65A-3-3 will be repaid to the Wildland Fire Suppression Fund.

R652-121-400. Revocation of Participation in Fund.

1. Participation in the Wildland Fire Suppression Fund may be revoked for failure to:

- (a) enter into a cooperative agreement with the Division,
- (b) comply with the terms of the cooperative agreement with the Division; or
- (c) fulfill its participation commitment.

2. The division will notify a participating entity in writing of any breach of the cooperative agreement.

3. Failure to remedy a breach may result in revocation of the entity's cooperative agreement pursuant to the terms of the cooperative agreement which shall preclude participation in the Wildland Fire Suppression Fund.

4. The revocation decision may be informally appealed to the State Forester within 30 days of the notice. The State Forester may conduct an investigation, hold an informal hearing, or request additional information. The final decision of the State Forester will be sent to the entity.

R652-121-500. Withdrawal from Participation in Fund.

1. An entity may withdraw from participation in the fund by revoking its cooperative agreement the end of the agreement's

term by:

(a) informing the division, in writing, of the eligible entity's intention to revoke the cooperative agreement; or

(b) failing to sign and return its annual financial statement as described in R652-120-400(5)(e), unless an extension has been granted by the Division.

R652-121-600. Reinstatement of Participation in Fund.

1. An eligible entity that voluntarily withdrew participation in the Wildland Fire Suppression Fund pursuant to R652-121-500 may enter into a new cooperative agreement with the Division and become a participating entity.

2. An eligible entity whose participation in the Wildland Fire Suppression Fund was revoked by the division pursuant to R652-121-400 may enter into a new cooperative agreement with the Division and become a participating entity only after remedying the breach that resulted in the revocation. If the revocation was due to failure to fulfill the participation commitment for one or more years, the eligible entity shall agree to fulfill the previous participation commitments during the first three-year term of the new cooperative agreement in addition to the participation commitments for each year of the cooperative agreement.

KEY: administrative procedures, wildland fire fund

January 10, 2017

65A-8-207

Notice of Continuation August 28, 2017

R657. Natural Resources, Wildlife Resources.**R657-6. Taking Upland Game.****R657-6-1. Purpose and Authority.**

(1) Under authority of Sections 23-14-18 and 23-14-19 and in accordance with 50 CFR 20, 2004 edition, which is incorporated by reference, the Wildlife Board has established this rule for taking upland game.

(2) Specific season dates, bag and possession limits, areas open, number of permits and other administrative details that may change annually are published in the guidebook of the Wildlife Board for taking upland game and wild turkey.

R657-6-2. Definitions.

(1) Terms used in this rule are defined in Section 23-13-2.

(2) In addition:

(a) "Bait" means shelled, shucked or unshucked corn, wheat or other grain, salt or other feed that lures, attracts or entices upland game.

(b) "Baiting" means the direct or indirect placing, exposing, depositing, distributing, or scattering of salt, grain, or other feed that could serve as a lure or attraction for upland game to, on, or over any areas where hunters are attempting to take them.

(c) "CFR" means the Code of Federal Regulations.

(d) "Falconry" means the sport of taking quarry by means of a trained raptor.

(e) "Landowner" means any individual, family or corporation who owns property in Utah and whose name appears on the deed as the owner of eligible property or whose name appears as the purchaser on a contract for sale of eligible property.

(f) "Migratory game bird" means, for the purposes of this rule, American crow, mourning dove, white-winged dove, band-tailed pigeon, and Sandhill crane.

(g) "Transport" means to ship, carry, export, import, receive or deliver for shipment, conveyance, carriage, exportation or importation.

(h) "Upland game" means pheasant, quail, chukar partridge, gray partridge, greater sage-grouse, ruffed grouse, dusky grouse, sharp-tailed grouse, cottontail rabbit, snowshoe hare, white-tailed ptarmigan, and the following migratory game birds: American crow, mourning dove, white-winged dove, band-tailed pigeon, and Sandhill crane.

R657-6-3. Migratory Game Bird Harvest Information Program.

(1) A person must obtain a Migratory Game Bird Harvest Information Program (HIP) registration number to hunt migratory game birds.

(2)(a) A person may call the telephone number or register online as published in the guidebook of the Wildlife Board for taking upland game and wild turkey to obtain their HIP registration number.

(b) A person must write their HIP registration number on their current valid hunting license.

(3) Any person obtaining a HIP registration number will be required to provide their:

(a) hunting license number;

(b) hunting license type;

(c) name;

(d) address;

(e) phone number;

(f) birth date; and

(g) information about the previous year's migratory game bird hunts.

(4) Lifetime license holders will receive a sticker every three years from the Division to write their HIP number on and place on their lifetime license card.

(5) Any person hunting migratory game birds will be

required, while in the field, to possess a hunting or combination license with the HIP registration number recorded on the license, demonstrating they have registered and provided information for the HIP program.

R657-6-4. Permits for Band-tailed Pigeon, Greater Sage-grouse, Sharp-tailed Grouse and White-tailed Ptarmigan.

(1)(a) A person may not take or possess:

(i) Band-tailed pigeon without first obtaining a Band-tailed pigeon permit;

(ii) Greater sage-grouse without first obtaining a Greater sage-grouse permit;

(iii) Sharp-tailed grouse without first obtaining a Sharp-tailed grouse permit; or

(iv) White-tailed ptarmigan without first obtaining a White-tailed ptarmigan permit.

(b) A person may obtain only one permit for each species listed in Subsection (1)(a), except a falconer with a valid Falconry Certificate of Registration may obtain one additional two-bird Greater sage-grouse permit beginning on the date published in the guidebook of the Wildlife Board for taking upland game and wild turkey, if any permits are remaining.

(2)(a) A limited number of two-bird Greater sage-grouse permits are available in the areas published in the guidebook of the Wildlife Board for taking upland game and wild turkey.

(b) A Greater sage-grouse permit may only be used in one of the open areas as published in the guidebook of the Wildlife Board for taking upland game and wild turkey.

(c) Greater sage-grouse permits will be issued pursuant to R657-62-21.

(3)(a) A limited number of two-bird, Sharp-tailed grouse permits are available.

(b) A Sharp-tailed grouse permit may only be used in one of open areas as published in the guidebook of the Wildlife Board for taking upland game and wild turkey.

(c) Sharp-tailed grouse permits will be issued pursuant to R657-62-21.

(4) Band-tailed pigeon and White-tailed ptarmigan permits are available from Division offices, through the mail, and through the Division's Internet address by the first week in August, free of charge.

R657-6-5. Application Procedure for Sandhill Crane.

(1)(a) Sandhill crane permits will be issued pursuant to R657-62-21.

(b) Residents and nonresidents may apply.

(c) The application period for Sandhill crane is published in the guidebook of the Wildlife Board for taking upland game and wild turkey.

(2) A person may obtain only one Sandhill crane permit each year.

R657-6-6. Authorized Weapons.

(1) A person may not use any weapon or device to take upland game except as provided in this section.

(2)(a) Upland game may be taken with archery equipment, including a draw-lock, a crossbow, a shotgun no larger than 10 gauge, or a handgun. Loads for shotguns and handguns must be one-half ounce or more of shot size ranging between no. 2 and no. 8, except:

(i) migratory game birds may not be taken with a handgun, or a shotgun capable of holding more than three shells, unless it is plugged with a one-piece filler, incapable of removal without disassembling the gun, so its total capacity does not exceed three shells;

(ii) cottontail rabbit and snowshoe hare may be taken with any firearm not capable of being fired fully automatic; and

(iii) Sandhill crane may be taken with any size of nontoxic shot.

- (3) A person may not use:
 - (a) a firearm capable of being fired fully automatic; or
 - (b) any light enhancement device or aiming device that casts a visible beam of light.

R657-6-7. Nontoxic Shot.

- (1) Only nontoxic shot may be used to take Sandhill crane.
- (2) Except as provided in Subsection (3), nontoxic shot is not required to take any species of upland game, except Sandhill crane.
- (3) A person may not possess or use lead shot or any other shot that has not been approved by the U.S. Fish and Wildlife Service while on federal refuges or the following state waterfowl or wildlife management areas: Bicknell Bottoms, Blue Lake, Brown's Park, Clear Lake, Desert Lake, Farmington Bay, Harold S. Crane, Howard Slough, Locomotive Springs, Manti Meadows, Mills Meadows, Ogden Bay, Powell Slough, Public Shooting Grounds, Salt Creek, Scott M. Matheson Wetland Preserve, Stewart Lake, and Timpie Springs.

R657-6-8. Use of Firearms, Crossbows and Archery Tackle on State Wildlife Management Areas.

- (1) A person may not discharge a firearm, crossbow, or archery tackle on the Bear River Trenton Property Parcel, Browns Park, Bud Phelps, Huntington, James Walter Fitzgerald, Kevin Conway, Manti Meadows, Montes Creek, Nephi, Pahvant, Redmond Marsh, Roosevelt, Scott M. Matheson Wetland Preserve, Stewart Lake, Vernal, and Willard Bay Wildlife Management areas during any time of year, except:
 - (a) the use of authorized weapons as provided in Utah Admin. Code R657-6-6 during open hunting seasons for lawful hunting activities;
 - (b) as otherwise authorized by the Division in special use permit, certificate of registration, administrative rule, proclamation, or an order of the Wildlife Board; or
 - (c) for lawful purposes of self-defense.

R657-6-9. Use of Firearms, Crossbows, and Archery Tackle on State Waterfowl Management Areas.

- (1) A person may not discharge a firearm, crossbow, or archery tackle on the Bicknell Bottoms, Blue Lake, Brown's Park, Clear Lake, Desert Lake, Farmington Bay, Harold S. Crane, Howard Slough, Locomotive Springs, Mills Meadows, Ogden Bay, Powell Slough, Public Shooting Grounds, Salt Creek, Stewart Lake, Timpie Springs and Topaz Waterfowl Management areas during any time of the year, except:
 - (a) the use of authorized weapons as provided in Utah Admin. Code R657-9-7 during open waterfowl hunting seasons for lawful hunting activities;
 - (b) as otherwise authorized by the Division in special use permit, certificate of registration, administrative rule, proclamation, or an order of the Wildlife Board; or
 - (c) for lawful purposes of self-defense.

R657-6-10. Shooting Hours.

- (1)(a) Except as provided in Subsection (b), shooting hours for upland game are as follows:
 - (i) American crow, band-tailed pigeon, mourning dove, white-winged dove, and Sandhill crane may be taken only between one-half hour before official sunrise through official sunset.
 - (ii) Greater sage-grouse, ruffed Grouse, dusky grouse, sharp-tailed grouse, white-tailed ptarmigan, chukar partridge, gray partridge, pheasant, quail, cottontail rabbit, and snowshoe hare may be taken only between one-half hour before official sunrise through one-half hour after official sunset.
 - (b) A person must add to or subtract from the official sunrise and sunset depending on the geographic location of the state. Specific times are provided in a time zone map in the

guidebook of the Wildlife Board for taking upland game and wild turkey.

- (2) A person may not discharge a firearm on state owned lands adjacent to the Great Salt Lake, state waterfowl management areas or on federal refuges between official sunset through one-half hour before official sunrise.

R657-6-11. State Parks.

- (1) Hunting of any wildlife is prohibited within the boundaries of all state park areas, except those areas designated open to hunting by the Division of Parks and Recreation in Rule R651-614-4.
- (2) Hunting with rifles and handguns in park areas designated open is prohibited within one mile of all park facilities including buildings, camp or picnic sites, overlooks, golf courses, boat ramps, and developed beaches.
- (3) Hunting with shotguns, crossbow, or archery tackle is prohibited within one quarter mile of the above stated areas.

R657-6-12. Falconry.

- (1)(a) Falconers must obtain an annual hunting or combination license and a valid falconry certificate of registration or license to hunt upland game and must also obtain:
 - (b) a Band-tailed pigeon permit before taking Band-tailed pigeon;
 - (c) a Greater sage-grouse permit before taking Greater sage-grouse;
 - (d) a Sharp-tailed grouse permit before taking Sharp-tailed grouse;
 - (e) a White-tailed ptarmigan permit before taking White-tailed ptarmigan; or
 - (f) a Sandhill crane permit before taking Sandhill crane.
- (2) Areas open and bag and possession limits for falconry are provided in the guidebook of the Wildlife Board for taking upland game and wild turkey.

R657-6-13. Baiting.

- (1) A person may not hunt upland game by the aid of baiting, or on or over any baited area where a person knows or reasonably should know that the area is or has been baited. An area is considered baited for 10 days after bait is removed, or 10 days after bait in an area is eaten. This section does not prohibit:
 - (a) the taking of any migratory game bird on or over the following lands or areas that are not otherwise baited areas:
 - (i) standing crops or flooded standing crops (including aquatics), standing, flooded or manipulated natural vegetation, flooded harvested croplands, or lands or areas where seeds or grains have been scattered solely as the result of a normal agricultural planting, harvesting, post-harvest manipulation or normal soil stabilization practice;
 - (ii) from a blind or other place of concealment camouflaged with natural vegetation;
 - (iii) from a blind or other place of concealment camouflaged with vegetation from agricultural crops, as long as such camouflaging does not result in the exposing, depositing, distributing or scattering of grain or other feed; or
 - (iv) standing or flooded standing agricultural crops where grain is inadvertently scattered solely as a result of a hunter entering or exiting a hunting area, placing decoys or retrieving downed birds.
 - (b) The taking of any upland game, except Sandhill crane, on or over lands or areas that are not otherwise baited areas, and where grain or other feed has been distributed or scattered solely as the result of manipulation of an agricultural crop or other feed on the land where grown or solely as the result of a normal agricultural operation.

R657-6-14. Use of Motorized Vehicles.

Motorized vehicle travel on all state wildlife management areas is restricted to county roads and improved roads that are posted open.

R657-6-15. Possession of Live Protected Wildlife.

It is unlawful for any person to hold in captivity at any time any protected wildlife, except as provided by Title 23, Wildlife Resources Code or any rules and regulations of the Wildlife Board. Protected wildlife that is wounded must be immediately killed and shall be included in the hunter's bag limit.

R657-6-16. Tagging Requirements.

(1) The carcass of a Sandhill crane, greater sage grouse, or sharp-tailed grouse must be tagged in accordance with Section 23-20-30.

(2) A person may not hunt or pursue Sandhill crane, greater sage grouse, or sharp-tailed grouse after any of the notches have been removed from the tag or the tag has been detached from the permit.

R657-6-17. Identification of Species and Sex.

One fully feathered wing must remain attached to each upland game bird and migratory game bird taken while it is being transported to allow species identification.

R657-6-18. Waste of Upland Game.

(1) A person may not waste or permit to be wasted or spoiled any protected wildlife or their parts.

(2) A person shall not kill or cripple any upland game without making a reasonable effort to retrieve the upland game animal.

R657-6-19. Utah Pheasant Project.

(1) Boy Scouts, Girl Scouts, or youth enrolled in 4-H or FFA may collect and rear pheasants from eggs in nests destroyed by normal hay mowing operations. The 4-H club leader, FFA adviser or Scout Master shall first apply for and obtain a certificate of registration for this activity.

(2) Landowners or operators of mowing equipment may collect the eggs and possess them for no more than 24 hours for pick up by a person with a certificate of registration.

(3) Pheasants must be released by 16 weeks of age.

(4) These pheasants remain the property of the state of Utah.

R657-6-20. Use of Dogs.

(1) An individual may not use or permit a dog to harass, pursue, or take protected wildlife unless otherwise allowed for in the Wildlife Code, administrative rules issued under Wildlife Code, or a guidebook of the Wildlife Board.

(2) Dogs may be used to locate and retrieve upland game during open upland game hunting seasons.

(3) Dogs are generally allowed on state wildlife management and waterfowl management areas, subject to the following conditions.

(a) dogs are not allowed on the following state wildlife management areas and waterfowl management areas between March 10 and August 31 annually or as posted by the Division:

- (i) Annabella;
- (ii) Bear River Trenton Property Parcel;
- (iii) Bicknell Bottoms;
- (iv) Blue Lake;
- (v) Browns Park;
- (vi) Bud Phelps;
- (vii) Clear Lake;
- (viii) Desert Lake;
- (ix) Farmington Bay;
- (x) Harold S. Crane;

- (xi) Hatt's Ranch
- (xii) Howard Slough;
- (xiii) Huntington;
- (xiv) James Walter Fitzgerald;
- (xv) Kevin Conway;
- (xvi) Locomotive Springs;
- (xvii) Manti Meadows;
- (xviii) Mills Meadows;
- (xix) Montes Creek;
- (xx) Nephi;
- (xxi) Ogden Bay;
- (xxii) Pahvant;
- (xxiv) Public Shooting Grounds;
- (xxv) Redmond Marsh;
- (xxvi) Richfield;
- (xxvii) Roosevelt;
- (xxviii) Salt Creek;
- (xxix) Scott M. Matheson Wetland Preserve;
- (xxx) Steward Lake;
- (xxxi) Timpie Springs;
- (xxxii) Topaz Slough;
- (xxxiii) Vernal; and
- (xxxiv) Willard Bay.

(b) The Division may establish special restrictions for Division-managed properties, such as on-leash requirements and temporary or locational closures for dogs, and post them at specific Division properties and at Regional offices;

(c) Organized events or group gatherings of twenty-five (25) or more individuals that involve the use of dogs, such as dog training or trials, that occur on Division properties may require a special use permit as described in R657-28; and

(d) Dog training may be allowed in designated areas on Lee Kay Center and Willard Bay WMA by the Division without a special use permit.

R657-6-21. Closed Areas.

A person may not hunt upland game in any area posted closed by the Division or any of the following areas:

(1) Salt Lake International Airport boundaries as posted.

(2) Incorporated municipalities: Many incorporated municipalities prohibit the discharge of firearms and other weapons. Check with the respective city officials for specific boundaries and limitations.

(3) Wildlife Management Areas:

(a) Waterfowl management areas are open for hunting upland game only during designated waterfowl hunting seasons or as authorized by the Division, including: Blue Lake, Clear Lake, Farmington Bay, Harold S. Crane, Howard Slough, Locomotive Springs, Manti Meadows, Mills Meadows, Ogden Bay, Powell Slough, Public Shooting Grounds, Salt Creek, Scott M. Matheson Wetland Preserve, Stewart Lake, and Timpie Springs.

(b) All National Wildlife Refuges unless declared open by the managing authority.

(c) Goshen Warm Springs is closed to upland game hunting.

(4) Military installations, including Camp Williams, are closed to hunting and trespassing.

R657-6-22. Live Decoys and Electronic Calls.

A person may not take migratory game birds by the use or aid of live decoys, recorded or electronically amplified bird calls or sounds, or recorded or electronically amplified imitations of bird calls or sounds.

R657-6-23. Shipping or Exporting.

(1) No person may transport upland game by the Postal Service or a common carrier unless the package or container has the name and address of the shipper and the consignee and an

accurate statement of the numbers of each species of birds contained therein clearly and conspicuously marked on the outside of the container.

(2) A shipping permit issued by the Division must accompany each package containing upland game within or from the state.

(3) A person may export upland game or their parts from Utah only if:

(a) the person who harvested the upland game accompanies it and possess a valid license or permit corresponding to the tag, if applicable; or

(b) the person exporting the upland game or its parts, if it is not the person who harvested the upland game, has obtained a shipping permit from the Division.

R657-6-24. Spotighting.

(1) Except as provided in Section 23-13-17:

(a) a person may not use or cast the rays of any spotlight, headlight or other artificial light to locate protected wildlife while having in possession a firearm or other weapon or device that could be used to take or injure protected wildlife; and

(b) the use of a spotlight or other artificial light in a field, woodland or forest where protected wildlife are generally found is prima facie evidence of attempting to locate protected wildlife.

(2) The provisions of this section do not apply to:

(a) the use of the headlights of a motor vehicle or other artificial light in a usual manner where there is no attempt or intent to locate protected wildlife; or

(b) a person licensed to carry a concealed weapon in accordance with Title 53, Chapter 5, Part 7 of the Utah Code, provided the person is not utilizing the concealed firearm to hunt or take wildlife.

R657-6-25. Season Dates, Bag and Possession Limits, and Areas Open.

Season dates, bag and possession limits, areas open, and number of permits for taking upland game are provided in the guidebook of the Wildlife Board for taking upland game and wild turkey.

KEY: wildlife, birds, rabbits, game laws

August 7, 2017

23-14-18

Notice of Continuation June 8, 2015

23-14-19

R657. Natural Resources, Wildlife Resources.**R657-12. Hunting and Fishing Accommodations for People With Disabilities.****R657-12-1. Purpose and Authority.**

Under authority of Sections 23-14-18, 23-19-1, 23-19-36, 23-20-12 and 63G-3-201, this rule provides the standards and procedures for a person with disabilities to:

- (1) obtain a certificate of registration for taking wildlife from a vehicle;
- (2) obtain a fishing license as authorized under Section 23-19-36(1);
- (3) obtain a certificate of registration to participate in companion hunting;
- (4) obtain a certificate of registration to receive a limited entry season extension;
- (5) obtain a certificate of registration to receive a general deer or elk season extension;
- (6) obtain a certificate of registration to hunt with a crossbow or draw-lock; or
- (7) obtain a certificate of registration to use telescopic sights on a weapon when otherwise prohibited.

R657-12-2. Definitions.

- (1) Terms used in this rule are defined in Section 23-13-2.
- (2) In addition:
 - (a) "Blind" means the person:
 - (i) has no more than 20/200 visual acuity in the better eye when corrected; or
 - (ii) has, in the case of better than 20/200 central vision, a restriction of the field of vision in the better eye which subtends an angle of the field of vision no greater than 20 degrees.
 - (b) "Crutches" means a staff or support designed to fit under or attach to each arm, including a walker, which improve a person's mobility that is otherwise severely restricted by a permanent physical injury or disability.
 - (c) "Draw-lock" means a mechanical device used to hold and support the draw weight of a conventional or compound bow at any increment of draw until released by the archer using a trigger mechanism attached to the device.
 - (d) "Loss of either or both lower extremities" means the permanent loss of use or the physical loss of one or both legs or a part of either or both legs which severely impedes a person's mobility.
 - (e) "Telescopic sights" means an optical or electronic sighting system that magnifies the natural field of vision beyond 1X and is used to aim a firearm, bow or crossbow.
 - (f) "Upper extremity disabled" means a person who has a permanent physical impairment due to injury or disease, congenital or acquired, which renders the person so severely disabled as to be physically unable to use any legal hunting weapon or fishing device.

R657-12-3. Providing Evidence of Disability for Obtaining a Fishing License.

- (1) A resident may receive a free fishing license under Section 23-19-36(1) by providing evidence the person is blind, paraplegic, or otherwise permanently disabled so as to be permanently confined to a wheelchair or the use of crutches, or who has lost either or both lower extremities.
- (2) A person may obtain this license at any division office.
- (3) The division shall accept the following as evidence of disability:
 - (a) obvious physical impediment;
 - (b) use of any mobility device described in Section R657-12-2(b);
 - (c) a signed statement by a licensed ophthalmologist, optometrist, or a physician verifying the person is blind as defined under Section R657-12-2(a); or
 - (d) a signed statement by a licensed physician verifying the

person is paraplegic, or otherwise permanently disabled so as to be permanently confined to a wheelchair or the use of crutches, or has lost either or both lower extremities.

R657-12-4. Obtaining Authorization to Hunt from a Vehicle.

- (1) A person who is paraplegic, or otherwise permanently disabled so as to be permanently confined to a wheelchair or the use of crutches, or who has lost either or both lower extremities, and who possesses a valid license or permit to hunt protected wildlife may receive a certificate of registration to take protected wildlife from a vehicle pursuant to Section 23-20-12.
 - (2)(a) Applicants for the certificate of registration must provide evidence of disability as provided in Subsections R657-12-3(3)(a), (b), or (d).
 - (b) Certificates of registration may be renewed annually.
 - (3) Wildlife may be taken from a vehicle under the following conditions:
 - (a) Only those persons with a valid hunting license or permit and a certificate of registration allowing them to hunt from a vehicle may discharge a firearm or bow from, within, or upon any motorized terrestrial vehicle;
 - (b) Shooting from a vehicle on or across any established roadway is prohibited;
 - (c)(i) Firearms must be carried in an unloaded condition, and a round may not be placed in the firearm until the act of firing begins, except as authorized in Title 53, Chapter 5, Part 7 of the Utah Code; and
 - (ii) Arrows must remain in the quiver until the act of shooting begins; and
 - (d) Certificate of registration holders must be accompanied by, and hunt with, a person who is physically capable of assisting the certificate of registration holder in recovering wildlife.
 - (4) Certificate holders must comply with all other laws and rules pertaining to hunting wildlife, including state, federal, and local laws regulating or restricting the use of motorized vehicles.

R657-12-5. Companion Hunting and Fishing.

- (1) A person may take protected wildlife for a person who is blind, upper extremity disabled or quadriplegic provided the blind, upper extremity disabled or quadriplegic person:
 - (a) satisfies hunter education requirements as provided in Section 23-19-11 and Rule R657-23;
 - (b) possesses the appropriate license, permit and tag;
 - (c) obtains a Certificate of Registration from the division authorizing the companion to take protected wildlife from the blind, upper extremity disabled or quadriplegic person; and
 - (d) is accompanied by a companion who has satisfied the hunter education requirements provided in Section 23-19-11 and Rule R657-23.
- (2) A person who is blind may obtain a Certificate of Registration from the Division by submitting a signed statement by a licensed ophthalmologist, optometrist or physician verifying that the applicant is blind as defined in Section R657-12-2(2)(a).
 - (3)(a) A person who is upper extremity disabled or quadriplegic may obtain a Certificate of Registration from the division upon submitting evidence of the disability.
 - (b) The division shall accept the following as evidence of an applicant's disability:
 - (i) obvious physical disability demonstrating the applicant is quadriplegic or upper extremity disabled as defined in Section R657-12-2(2)(d); or
 - (ii) a signed statement by a licensed physician verifying that the applicant is quadriplegic or upper extremity disabled as defined in Section R657-12-2(2)(d).
 - (4) The hunting or fishing companion must be accompanied by the blind, upper extremity disabled or

quadriplegic person at all times while hunting or fishing, at the time of take, and while transporting the protected wildlife.

R657-12-6. Special Season Extension for Disabled Persons - Limited Entry Hunts.

(1) A person may obtain a Certificate of Registration from a division office requesting an extension for any limited entry hunt, provided the person requesting the extension:

(a) is blind, quadriplegic, upper extremity disabled, paraplegic, or otherwise permanently disabled so as to be permanently confined to a wheelchair or the use of crutches, or who has lost either or both lower extremities;

(b) satisfies the hunter education requirements as provided in Section 23-19-11 and Rule R657-23; and

(c) obtains the appropriate license, permit, and tag.

(2) The division shall not issue a Certificate of Registration for an extension on any limited entry hunt where the extension will violate federal law.

(3) The division shall accept the following as evidence of disability:

(a) obvious physical impediment;

(b) use of any mobility device described in Section R657-12-2(2)(b);

(c) a signed statement by a licensed ophthalmologist, optometrist, or a physician verifying the person is blind as defined under Section R657-12-2(2)(a); or

(d) a signed statement by a licensed physician verifying the person is quadriplegic, upper extremity disabled as defined under Section R657-12-2(2)(d), paraplegic, or otherwise permanently disabled so as to be permanently confined to a wheelchair or the use of crutches, or has lost either or both lower extremities.

R657-12-7. Special Season Extension for Disabled Persons - General Deer, Elk and Wild Turkey Hunts.

(1) A person may obtain a Certificate of Registration from a division office to hunt an extended general deer, elk or wild turkey season as provided in Subsection (2), provided the person requesting the extension:

(a) is blind, quadriplegic, upper extremity disabled, paraplegic, or otherwise permanently disabled so as to be permanently confined to a wheelchair or the use of crutches, or who has lost either or both lower extremities;

(b) satisfies the hunter education requirements as provided in Section 23-19-11 and Rule R657-23; and

(c) obtains the appropriate license, permit and tag.

(2)(a) The extended general deer season may include:

(i) a hunt immediately preceding the general any weapon buck deer season opening date published in the guidebook of the Wildlife Board for taking big game;

(A) the extension may not apply to general any weapon deer hunts with season length restrictions.

(b) The extended general spike bull elk season may occur five days after the general season spike bull elk hunt published in the guidebook of the Wildlife Board for taking big game.

(c) The extended general any bull elk season may occur concurrently with the general youth any bull elk hunt published in the guidebook of the Wildlife Board for taking big game.

(d) The extended general wild turkey season may occur seven days prior to the limited entry turkey hunt season as published in the guidebook of the Wildlife Board for taking Upland Game and Wild Turkey.

(3) The division shall accept the following as evidence of disability:

(a) obvious physical impediment;

(b) use of any mobility device described in Section R657-12-2(2)(b);

(c) a signed statement by a licensed ophthalmologist, optometrist, or a physician verifying the person is blind as

defined under Section R657-12-2(2)(a); or

(d) a signed statement by a licensed physician verifying the person is quadriplegic, upper extremity disabled as defined under Section R657-12-2(2)(d), paraplegic, or otherwise permanently disabled so as to be permanently confined to a wheelchair or the use of crutches, or has lost either or both lower extremities.

R657-12-8. Crossbows and Draw-Locks.

(1)(a) A person who has a permanent physical impairment due to injury or disease, congenital or acquired, which renders the person so severely disabled as to be unable to use conventional archery equipment may receive a certificate of registration to use a crossbow or draw-lock to hunt big game, cougar, bear, turkey, waterfowl, small game or carp during the respective archery, any weapon hunting, or fishing seasons as provided in the applicable guidebooks of the Wildlife Board for taking protected wildlife.

(b) The division shall accept the following as evidence of eligibility to use a crossbow or draw-lock:

(i) obvious physical disability, as provided in Subsection (1)(a), demonstrating the applicant is eligible to use a crossbow or draw-lock; or

(ii) a physician's statement confirming the disability as defined in Subsection (1)(a).

(2)(a) Any crossbow used to hunt big game, cougar, bear, turkey, waterfowl or small game must comply with the requirements in R657-5-11(6), except a crossbow used to hunt turkey, waterfowl, or small game may have a minimum draw weight of 60 pounds.

(3)(a) Any crossbow or drawlock used to hunt carp must have a:

(i) reel with line capable of tethering the bolt to restrict the flight distance; and

(ii) positive safety mechanism.

(4) Conventional bows equipped with a draw-lock and used to hunt big game must conform with the minimum draw weights, and arrow and broadhead restrictions contained in R657-5.

R657-12-9. Telescopic Sights.

(1) A person who has a permanent vision impairment leaving them with worse than 20/40 corrected visual acuity in the better eye may receive a Certificate of Registration to use telescopic sights when otherwise prohibited by the rules and proclamations of the Wildlife Board; if in the professional opinion of the eye care provider telescopic sights will sufficiently mitigate the effects of the disability to enable the person to:

(a) adequately discern between lawful and unlawful wildlife species and species genders; and

(b) safely discharge a firearm or bow in the field.

(2) A person with a qualified vision impairment may obtain a Certificate of Registration from the Division to use telescopic sights, when otherwise prohibited, by submitting a signed statement from a licensed ophthalmologist, optometrist or physician verifying that:

(a) the applicant has a permanent vision impairment resulting in worse than 20/40 corrected visual acuity in the better eye; and

(b) telescopic sights will sufficiently mitigate the effects of the vision impairment to enable the applicant to:

(i) adequately discern between lawful and unlawful wildlife species and species genders; and

(ii) safely discharge a firearm or bow in the field.

R657-12-10. Fishing Licenses for Veterans with Disabilities.

(1) A resident who has a service-connected disability of 20% or more and is not eligible to fish without a license under

Section 23-19-14 or to receive a free fishing license under Section 23-19-36 may purchase a discounted 365-day fishing license upon furnishing verification of a service-connected disability and paying the fee established in the approved fee schedule.

(a) "Armed Forces" means the United States Army, Navy, Marine Corps, Air Force, and Coast Guard, including the reserve components thereof and the Army and Air National Guard of the United States.

(b) "Service-connected disability" means injury or illness incurred or aggravated:

(i) while in Armed Forces service; and

(ii) that is recognized by the United States Department of Veterans Affairs or by a branch of the Armed Forces.

(c) "Verification of Service-Connected Disability" means an official written letter, statement, or card issued by the Department of Veterans Affairs or by a branch of the Armed Forces certifying that the person has a service-connected disability with a disability rating of 20% or higher.

(2) The discount provided in this section on the purchase of a fishing license does not apply to combination licenses.

(3) Veteran fishing licenses shall be issued at division offices and may be issued by mail, online or at license agents. The purchaser may be required to complete an affidavit of the service-connected disability at the time of purchase.

R657-12-11. Administrative and Judicial Review.

(1) A person may request administrative review of the division's partial or complete denial of a certificate of registration under this chapter by delivering a written request for administrative review to the division director or designee within 30 days of the date of denial.

(2) The request for administrative review shall include:

(a) the name, address, and phone number of the petitioner;

(b) a specific description of the disability involved and the physical limitations imposed by that disability;

(c) a specific description of the accommodations requested to mitigate the physical limitations caused by the disability; and

(d) verifiable medical or other information describing the disability and the medical need for the requested accommodation.

(3) A person may appeal the division director's or designee's decision under Subsection (1) by filing a request for agency action pursuant to R657-2.

KEY: wildlife, wildlife law, disabled persons

February 10, 2014

23-20-12

Notice of Continuation August 15, 2017

63G-3-201

R657. Natural Resources, Wildlife Resources.**R657-20. Falconry.****R657-20-1. Purpose and Authority.**

(1) Under authority of Section 23-17-7 and in accordance with the Migratory Bird Treaty Act in 16 U.S.C. 703-12 (50 CFR 21 10/01/2000), and Bald the Bald and Golden Eagle Protection Act in 16 U.S.C. 668-668d (50 CFR 22), which is incorporated by reference, the Wildlife Board has established this rule for the practice of falconry in the state of Utah.

(2) Take and or possession of any raptor species for the practice of falconry must be in compliance with these regulations.

(3) Raptor species possessed under the authority of this rule must be trained in the pursuit of wild game and used in hunting, unless specifically noted otherwise in special provisions granted under this rule.

(4) A federal falconry permit is no longer required for practicing the sport of falconry in the state of Utah.

(5) The Federal Migratory Bird Treaty Act prohibits any person from taking, possessing, purchasing, bartering, selling, or offering to purchase, barter, or sell, among other things, raptors listed in Code of Federal Regulations 50 CFR 10.13, unless the activities are allowed under provisions of this rule, or are permitted by other applicable state or Federal regulations.

(a) This rule covers all avian species in the Order Accipitriformes (i.e., vultures, California Condor, kites, eagles and hawks), Order Falconiformes (i.e., caracaras, and falcons) and Order Strigiformes (i.e., owls), and hybrids thereof, and applies to any person who possesses one (1) or more wild-caught, captive-bred, or hybrid raptors to use in falconry.

(b) The Bald and Golden Eagle Protection Act in 16 U.S.C. 668-668d and 54 Stat. 250 provides for the taking of golden eagles from the wild to use in falconry, and specifies that the only golden eagles that may be used for falconry are those that would be taken because of depredations on livestock or wildlife (16 U.S.C. 668a).

(6) Specific season dates, possession limits, open and closed areas, number of permits or CORs for birds available for take in a given season, and other administrative matters pertaining to the practicing of falconry are available online at <http://wildlife.utah.gov>.

(7) Possession of any raptor, raptor egg, shell fragment, semen, or any raptor part without a valid and applicable state COR or Federal permit is probable cause that the raptor, raptor egg, shell fragment, semen, or any raptor part was illegally taken and is illegally held in possession.

(8)(a) Pursuant to Utah Code Section 23-19-9, the Division has the authority to suspend or revoke any or all of the privileges granted under this rule.

(b) A permittee whose falconry COR has been suspended may reapply for a COR, pursuant to the application procedures in this rule at the end of the suspension period.

(9) Nothing in this rule shall be construed as to allow the intentional taking of protected wildlife in violation of federal or state laws, rules, regulations, or guidebooks.

R657-20-2. Definitions.

(1) Terms used in this rule are defined in Utah Code Section 23-13-2 and R657-6-2.

(2) In addition:

(a) "Abatement activities" means use of trained raptors to flush, haze or take birds (or other wildlife where allowed) to mitigate depredation problems, including threats to human health and safety.

(b) "Aerie" refers to the nest of any raptor.

(c) "Bate" refers to a hawk or falcon that attempts to fly while being tethered to the falconer's fist, a block or other form of perch, whether from wildness, or for exercise, or in an attempt to chase.

(d) "Business Day" refers to any day the Division is open for business

(e) "Captive-bred" refers to raptors, including eggs, hatched in captivity from parents that mated or otherwise transferred gametes in captivity.

(f) "CFR" means the Code of Federal Regulations.

(g) "COR" for purposes of this rule means a Certificate of Registration (permit) issued by the Division authorizing an individual to participate in the sport of falconry.

(h) "Eyas" means a young raptor not yet capable of sustained flight such as a nestling or fledgling.

(i) "Division" means the Utah Division of Wildlife Resources.

(j) "Falconry" means, for the purposes of this rule, caring for and training raptors for pursuit of wild game, and hunting wild game with raptors. Falconry includes the taking of raptors from the wild to use in the sport of falconry; and caring for, training, and transporting raptors held for falconry.

(k) "Fledged" means the stage in a young raptor's life when the feathers and wing muscles are sufficiently developed for flight. A young raptor that has recently fledged but is still dependent upon parental care and feeding is called a fledgling.

(l) "Form 3-186A" means the federal Migratory Bird Acquisition and Disposition Report form.

(m) "Hacking" means the temporary or permanent release of a raptor held for falconry to the wild so that it may survive on its own.

(n) "Haggard" means a wild adult raptor.

(o) "Humane treatment" for purposes of this rule means to maintain raptors in accordance with accepted standards for practicing falconry, including care and treatment of a raptor so that it is physically healthy and maintaining raptors under conditions that are known to prevent predictable illness or injury.

(p) "Hybrid" means offspring of birds listed as two (2) or more distinct species.

(q) "Imping" means to graft new or additional feathers to existing feather shafts on a raptor's wing(s) or tail to repair damage or to increase flying capacity.

(r) "Imprint", for the purposes of falconry, means a bird that is hand-raised in isolation from the sight of other raptors from two (2) weeks of age until it has fully feathered. An imprinted bird is considered to be so for its entire lifetime.

(s) "Landowner" means any individual, family or corporation who owns property in Utah and whose name appears on the deed as the owner of eligible property or whose name appears as the purchaser on a contract for sale of eligible property, or who is a lessee of the property.

(t) "Livestock depredation area" means a specific geographic location in which depredation on livestock by Golden Eagles (*Aquila chrysaetos*) has been recognized.

(u) "Marker or band" means a numbered band issued by the Service which, when affixed to a raptor's leg, identifies an individual raptor and its source under the following requirements:

(i) a permanent, nonreusable (plastic, zip-tie) black-colored numbered leg bands identify an individual raptor that has been taken from the wild;

(ii) a seamless (metal) yellow-colored numbered leg bands identify an individual raptor that has been captive-bred; or

(iii) a permanent, nonreusable (plastic, zip-tie) yellow-colored numbered leg bands are used when a seamless band needs to be replaced.

(v) "Meet" means, for purposes of this rule, an organized falconry event where protected wildlife may be taken and for which a five (5) day non-resident meet hunting license is approved by the Division Director or designee.

(w) "Mews" refers to a protected indoor facility (a residence or non-residence) where raptors are kept for falconry

purposes.

(x) "Migratory game bird" means, for the purposes of this rule, those species listed in R657-6 and R657-9.

(y) "Nest" refers to the structure or place where a raptor lays eggs and shelters its young.

(z) "Passage raptor" means a first-year raptor capable of sustained flight that is no longer dependent upon parental care and/or feeding

(aa) "Raptor" means any bird of the Order Accipitriformes, Order Falconiformes or the Order Strigiformes and hybrids thereof unless defined otherwise in this rule.

(bb) "Reasonable time of day" for inspections or other business at a falconer's facilities refers to hours the Division is open for business, or some other prearranged time between the falconer and the Division representative.

(cc) "Service" means the U.S. Fish and Wildlife Service.

(dd) "Take" means to hunt, pursue, harass, catch, capture, possess, angle, seine, trap or kill any protected wildlife, or attempt any such action.

(ee) "Transport" means to ship, carry, export, import, receive or deliver for shipment, conveyance, carriage, exportation or importation.

(ff) "Trial" means, for purposes of this rule, an organized falconry event where European Starling (*Sturnella neglecta*), House Sparrow (*Passer domesticus*), Rock Dove/feral pigeon (*Columba livia*), Eurasian Collared-Dove (*Streptopelia decaocto*), pen-reared game birds, and lawfully possessed, domestic birds may be taken.

(gg) "Upland game" means, for purposes of this rule, those species defined by R657-6 and R657-9.

(hh) "Weathering Area" means a protected outdoor facility where raptors are kept for falconry purposes that meet the requirements established in R657-20-6.

(ii) "Wild" refers to an animal in its original natural state of existence. Animals that are domesticated or cultivated are not considered wild.

(jj) "Year" refers to a normal calendar year of January 1 to December 31, unless defined otherwise in this rule.

R657-20-3. Minimum Age Requirement.

(1) A person who wishes to practice the sport of falconry in Utah must be at least 12 years of age.

R657-20-4. Falconry COR, Permits, and Licenses.

(1) The division may deny issuing a COR or permit to any applicant, if:

(a) The applicant has violated any provision of Title 23, Utah Wildlife Resources Code, Administrative Code R657, a certificate of registration, an order of the Wildlife Board or any other law that when considered with the functions and responsibilities of practicing the sport of falconry bears a reasonable relationship to the applicant's ability to safely and responsibly carry out such activities;

(b) the applicant misrepresented or failed to disclose material information required in connection with the application; or

(c) holding raptors at the proposed location violates federal, state, or local laws.

(2) A COR is not transferrable.

(3) CORs do not provide the holder with any rights of succession.

(4) Any COR issued to a business or organization shall be void upon the termination of the business or organization or upon bankruptcy or transfer.

(5)(a) A resident must possess a valid COR issued by the Division to take, possess, hunt with, or transport raptors for the purpose of falconry in Utah.

(b) A falconry COR requires up to a 30-business day processing time from the date an application is received.

(c) A falconry COR is valid at the Apprentice Class level for a three (3)-year period from date of issuance.

(d) A falconry COR is valid at the General and Master Class level for a five (5)-year period from date of issuance.

(6) The falconer must have a falconry COR or a legible copy of it in their immediate possession when not at the location of their falconry facilities and is trapping, transporting, working with, or flying raptors in falconry.

(7)(a) A falconer must obtain a Raptor Capture Permit prior to capturing or attempting to capture any raptor from the wild in Utah.

(b) A valid falconry COR is required for a Utah resident in order to obtain a Raptor Capture Permit.

(c) Nonresident falconers are not required to purchase a Utah falconry COR in order to purchase a Nonresident Raptor Capture Permit.

(8) An individual possessing a valid falconry COR may use a raptor for unrestricted take of unprotected wildlife including coyote, field mouse, gopher, ground squirrel, jackrabbit, muskrat, raccoon, and European Starling, House Sparrow, Eurasian Collared Dove, and Rock Dove or feral pigeon, consistent with the following provisions:

(a) A resident falconer is not required to possess any other license or permit take these species;

(b) A non-resident falconer is required to have a current falconry license or permit from his/her state of residence and a valid federal falconry permit, if applicable.

(9) A falconer may take any species with a falconry bird for which a Federal Depredation Order is in place under parts 21.43, 44, or 46 of 50 CFR 21, at any time in accordance with the conditions of the applicable depredation order, as long as the falconer is not paid for doing so.

(10) A falconer releasing a raptor for the purpose of hunting protected wildlife not identified in R657-20-4(8) that are not held in private ownership must first obtain the appropriate licenses, permits, tags, CORs and stamps as provided in the applicable rules and guide books of the Wildlife Board, consistent with the following provisions:

(a) The hunting of upland game shall be done in accordance with the rule and guide book of the Wildlife Board for taking upland game species; and

(b) The hunting of migratory game birds shall be done in accordance with the rule and guide book of the Wildlife Board for taking migratory game species.

(11)(a) A hunting license is not required to take pen-reared game birds with a trained raptor if the game birds are lawfully possessed and banded with a permanent leg band purchased from the Division or other permanent marking.

(b) Pen-reared game birds used in falconry must comply with all requirements in R657-4 and all requirements established by the Utah Department of Agriculture and Food.

R657-20-5. Application for a Falconry COR.

(1) To obtain a falconry COR, applicants must have either an indoor mews or an outdoor weathering area, or both pursuant to Section R657-20-6.

(2) Resident Applications.

(a) A resident applying for or renewing a falconry COR shall:

(i) submit a completed falconry application to the Division;

(ii) identify species and number of birds proposed to be held at a given facility; and

(iii) include the appropriate COR fee.

(b) As a condition to obtaining a falconry COR, the falconer agrees to reasonable administrative inspections of falconry raptors, facilities, equipment, CORs, and related documents.

(c) Falconry raptors, facilities, equipment, and documents

may be inspected by the Division only in the presence of the permittee at a reasonable time of day.

(d) At the time of renewal, the current falconry COR number must be included on the falconry COR renewal application.

(e) A falconer claiming residency in Utah may not claim residency in, or possess a resident falconry license or falconry permit from, another state.

(f)(i) Resident falconers wishing to renew a valid falconry COR must submit a completed falconry COR renewal form to the Division upon or before the expiration date specified on the current falconry COR.

(ii) Falconry COR renewals require up to a 30 business-day processing time for completion.

(g) Residents who do not hold a valid falconry COR or do not submit a COR renewal form by the date their current COR lapses and who maintain raptors in possession are in violation of unlawful captivity of protected wildlife under Sections 23-13-4 and 23-20-3.

(h) Failure to submit required records and timely, accurate, or valid reports may result in administrative action by the Division, including:

(i) Issuance of a probationary COR with restrictions on activities allowed; or

(ii) Non-renewal of a COR until the required records and reports are completed.

(j)(i) A falconry COR is considered to be lapsed if the falconer has not applied for renewal within 30 calendar days of the expiration of their current COR.

(ii) Disposition of raptors held under a lapsed falconry COR is at the discretion of the Division.

(iii) Raptors held under a lapsed falconry COR are subject to seizure by the Division.

(k) A falconer who has allowed their COR to lapse may apply for a new COR.

(l) If a falconry COR has lapsed for fewer than five (5) years, it will be reinstated at the level held previously if:

(i) proof of certification at that level is provided to the Division;

(ii) the applicant has facilities and equipment that meet the requirements in R657-20-6; and

(iii) the applicant is otherwise qualified to obtain a COR pursuant to R657-20-4.

(m)(i) If a falconry COR or Permit has lapsed for five (5) years or longer, an applicant must correctly answer at least 80 percent of the questions on an examination administered by the Division as required in Section R657-20-9(1)(b).

(ii) If the applicant passes the examination, a falconry COR will be reinstated at the level previously held.

(iii) The applicant's facilities and equipment must also pass inspection by a Division representative before possessing a raptor for falconry as required in Sections R657-20-6.

(3) Falconers Wishing to Establish Residency in Utah.

(a) A falconer entering Utah to establish residency must possess the following:

(i) A copy of the previous state's valid falconry license indicating class designation;

(ii) a current federal falconry permit number, if applicable;

(iii) a valid health certificate for each raptor in possession;

(iv) the number and species of raptors with the band numbers (if banded) for each raptor held in possession; and

(v) any additional documentation required by the Utah Department of Agriculture.

(b) A six (6)-month domicile period is required for a falconer entering Utah to establish residency.

(c) A falconer entering Utah to establish residency may possess legally obtained raptors that were acquired prior to entering Utah if the following requirements are satisfied:

(i) documentation satisfying import requirements for the

Utah Department of Agriculture for each falconry bird must be presented to the Division within five (5) business days after entering Utah;

(ii) the falconer must purchase all applicable Utah non-resident hunting licenses and/or permits if the raptor(s) is to be used for falconry during the six (6)-month period necessary to establish residency;

(iii) the falconer must maintain proper facilities and equipment as required in Sections R657-20-6, 7, and 8; and

(iv) possession of the raptor is allowed under the provisions of this rule.

(d) At the conclusion of the six (6)-month domicile period, a new resident applying for a falconry COR must submit the following to the Division:

(i) a completed falconry application indicating class designation;

(ii) a copy of a valid falconry license from the former state of residency indicating class designation;

(iii) a valid federal falconry permit number, if applicable; and

(iv) the appropriate COR fee.

(e) A falconer that holds raptors in possession and fails to apply for a falconry COR within 30 days of qualifying for residency is in violation Utah Code Sections 23-13-4 and 23-20-3, may be denied a falconry COR, and any raptors in their possession may be subject to seizure.

R657-20-6. Care and Facilities Requirements.

(1) A person may not possess a raptor without first providing adequate facilities and equipment to humanely house and care for the raptor.

(2) Care Requirements.

(a) The falconer is responsible for the maintenance and security of raptors held in his or her care.

(b) All raptors held under a falconry COR must be kept in humane and healthy conditions.

(c) The Division may impose additional requirements regarding the safe and humane handling and care of raptors that are necessary to ensure the birds are maintained in a healthy condition.

(3) Facilities Requirements and Inspections.

(a) The primary consideration for raptor housing facilities, whether an indoor mews or outdoor weathering area, is protection of the raptor from unauthorized human access and disturbance, the environment, predators, including domestic as well as wild animals, inhumane treatment, and other undue disturbances.

(b) Request for a facilities inspection must be made by contacting the Regional Division office where the facilities are located.

(c) Once a request is received, a facilities inspection will be completed by the Division within 30 business days of the date the request is received.

(d)(i) Before a person may obtain a falconry COR, the raptor housing facilities and equipment shall be inspected and approved by a Division representative.

(ii) Inspections must be conducted in the presence of the applicant.

(iii) In the course of this inspection, the Division representative may collect photographs of the facilities to keep on file with the falconer's records.

(e) Detailed photos and a description of facilities and equipment, including measurements of mews or weathering areas, shall constitute a temporary inspection for purposes of issuing CORs if the Division has not physically inspected within 30 business days.

(f) The COR may be revoked if significant changes to facilities are made without prior notification to the Division or if the photos and descriptions of facilities and equipment do not

match the facilities in place.

(g) Facilities must be adequate to house the number and species of raptors in possession.

(h) Only inspected and approved indoor mews and weathering areas may be used for housing raptors for falconry.

(i) In addition to inspected and approved facilities, raptors may also be housed inside a place of residence as provided in Section R657-20-6(4)(c).

(j) A new facilities inspection will be required when a permittee changes address, increases the number or species of raptors in their possession beyond capacity of the existing inspected facilities, or changes class of their falconry COR.

(k) The Utah Falconry Program Coordinator must be notified within five (5) business days of a change in the location of an individual's falconry facilities by submitting notice to falconry@utah.gov.

(l) Facilities requirements for non-resident falconers wishing to establish residency in Utah.

(i) A raptor may be housed in a temporary facility for no more than six (6) months, provided the temporary facility has been inspected and has a suitable perch for the raptor and adequately protects it from predators, domestic animals, extreme temperatures, wind, and excessive disturbance.

(ii) Following establishment of residency, the falconer must have facilities re-inspected to ensure compliance with the facilities requirements of this rule.

(m) Falconry facilities may be on property owned by another person, provided the falconer submits a signed and dated statement by the falconer and the property owner agreeing that the falconry facilities, equipment, and raptors may be inspected without advance notice by the Division at any reasonable time of day.

(4) The Mews.

(a) A mews shall:

(i) be large enough to allow easy access for the care and feeding of raptors kept inside;

(ii) provide for a healthy environment for each raptor inside;

(iii) have walls and ceiling that may be solid, barred, or covered with heavy duty netting, so long as any openings are narrower than the width of the body of the smallest raptor kept inside;

(iv) have a suitable perch for each raptor and at least one (1) opening for sunlight, or adequate lighting if mews is in a residence,

(v) be large enough to allow each raptor the opportunity to fly if it is untethered or, if tethered, to fully extend its wings or bate without damaging its feathers; and

(vi) include a pan of clean water large enough for each raptor housed in the mews to bathe in it that remains available to the housed raptors at all times, unless weather conditions, perch type used, or some other factor makes it inadvisable to have water available next to the raptor.

(b) Indoor facilities as a mews.

(i) Indoor mews used to house untethered raptors must be fully enclosed, unless the indoor mews are a place of residence.

(ii) Acceptable indoor facilities may include shelf perch enclosures where raptors are tethered side by side.

(iii) At the discretion of the Division, other housing systems may be approved if they provide the enclosed raptors with comparable facilities characteristics to those listed in R657-20-6(4) and the opportunity to maintain undamaged feathers.

(c) A place of residence as a mews.

(i) If a raptor is housed inside a place of residence, the residence must satisfy all of the general requirements of a mews identified in R657-20-6(4), except there is no need to modify windows or other openings in the residence.

(ii) Falconry raptors housed in a place of residence may satisfy the mews requirement, provided each raptor is tethered

to a suitable perch, except when being handled or when flown within a flight chamber.

(iii) Areas within a residence that may be used as a flight chamber must satisfy the following conditions:

(A) the flight chamber must have a source of light;

(B) the flight chamber must be fully enclosed;

(C) walls and ceiling of the flight chamber may be solid, barred, or covered with heavy duty netting; and

(D) if bars, heavy duty netting, or mesh are used, openings must be narrower than the width of the body of the smallest raptor housed in the flight chamber.

(d) Untethered raptors may be housed together in any mews if they are compatible with each other.

(5) Weathering Area.

(a) The weathering area must be:

(i) totally enclosed;

(ii) constructed of any suitable material capable of preventing the raptor's escape and excluding predators and other animals capable of causing harm to the raptor;

(iii) covered and have at least one (1) covered perch to protect a raptor from predators and weather;

(iv) large enough to insure that the raptor(s) cannot strike the enclosure when bating from the perch;

(v) include a pan of clean water large enough for each raptor housed in the mews to bathe in it;

(vi) provide a water source that that remains available to the housed raptors at all times, unless weather conditions, perch type used, or some other factor makes it inadvisable to have water available next to the raptor.

(b) Raptors must be tethered while inside the weathering area.

(c) Raptors may be perched next to a solid or fully opaque wall in the weathering area provided the proximity of the wall to the perch will not cause injury to the raptor or feather damage.

(d) New types of housing facilities and/or husbandry practices may be used if they satisfy the requirements of this chapter and are approved by the Division.

(6) Falconry raptors may be kept outside in the open at any location if they are under watch by an individual familiar with the handling of raptors.

(7) Raptors in transit must be provided with an adequate perch and protected from extreme temperatures, wind, and excessive disturbance to ensure the health, safety and protection of any raptor being transported.

R657-20-7. Temporary Care of Falconry Raptors.

(1) Short-term handling of a raptor by a person other than the permitted falconer, such as allowing a person to handle or practice flying a permittee's raptor, is not considered temporary possession for the purposes of this rule, provided the permittee is present and supervising the individual that is handling the raptor.

(2) Temporary care of raptors by another falconry permittee.

(a) Another falconry permittee may care for a falconer's raptors for up to 120 consecutive calendar days.

(b) The temporary care permittee must have a signed and dated statement from the falconer authorizing the temporary possession, in addition to a copy of the FWS Form 3-186A for that raptor.

(i) The signed and dated statement must identify the time period for which the temporary permittee will keep the raptors and what activities are allowed to be carried out with the raptors.

(ii) Falconry raptors in temporary care will remain on the original falconer's COR and will not be counted against the possession limit of the person providing the temporary care for the raptors.

(iii) If the permittee providing temporary care for the raptors holds the appropriate level falconry permit, then the temporary permittee may fly the raptors in whatever way authorized by the falconer, including hunting.

(iv) Temporary care of raptors may be extended by the Division Director or designee in extenuating circumstances such as, illness, military duty, and family emergency. The Division Director or designee will consider extenuating circumstances on a case-by-case basis.

(3) Temporary care of raptors by a non-falconer.

(a) A non-falconer may care for a falconer's raptors for up to 45 consecutive calendar days.

(b) The raptors will remain on the original falconer's COR.

(c) The raptors must remain at the original falconer's facilities.

(d) Temporary care of raptors by non-falconers may be extended by the Division Director or designee in extenuating circumstances such as illness, military duty, or family emergency. The Division Director or designee will consider extenuating circumstances on a case-by-case basis.

(e) A non-falconer caring for a falconer's raptors may not fly them for any reason.

(4) Transfer of falconry raptors when a permittee dies.

(a) A surviving spouse, executor, administrator, or other legal representative of a deceased falconry permittee may transfer any raptor(s) held by the deceased permittee to another authorized permittee within 90 calendar days of the death of the original falconry permittee.

(b) After 90 calendar days from the death of the falconry permittee, disposition of raptors held under the permit is at the discretion of the Division.

R657-20-8. Equipment.

(1) Prior to the facilities inspection and issuance of a falconry COR, the applicant shall possess the following items for each raptor in possession or for each raptor proposed for future capture:

(a)(i) at least one (1) pair of Aylmeri jesses, or similar type, made from pliable, high quality leather or suitable synthetic material, or the materials and equipment necessary to make Aylmeri jesses or other material to be used when any raptor is flown free; and

(ii) traditional one (1)-piece jesses may be used on raptors when not being flown;

(b) at least one (1) flexible, weather-resistant leash;

(c) at least one (1) swivel of acceptable falconry design;

(d) at least one (1) suitable container, two (2) to six (6) inches deep and wider than the length of the raptor, to hold drinking and bathing water for each raptor;

(e) at least one (1) perch of an acceptable design will be provided for use for each raptor;

(f) a reliable scale or balance suitable for weighing the raptor held and graduated to increments of not more than one (1)-half ounce or less; and

(g) for small raptors, such as kestrels, merlins, and sharp-shinned hawks, the scale must weight in increments of at least one (1) gram.

R657-20-9. Apprentice Class Falconer.

(1) Apprentice class falconer requirements.

(a) Applicants for an Apprentice Class falconry COR must be at least 12 years of age.

(b) Applicants for an Apprentice Class falconry COR who are under 18 years of age must have a parent or legal guardian sign their application.

(c) The parents or legal guardian of a minor Apprentice Class falconer under the age of 18 are legally responsible for the activities of their child.

(d) An individual may not take the falconry exam earlier

than two (2) months prior to their 12th birthday.

(e) Applicants for an Apprentice Class falconry COR must correctly answer at least 80 percent of the questions on an examination administered by a Division representative.

(f) The examination questions will cover basic care and handling of falconry raptors, state and Federal laws and regulations relevant to falconry, raptor biology, diseases and health issues, raptor identification, trapping, training methods, and other appropriate subject matter.

(i) An individual may contact any Division office for information about taking the examination.

(ii) Falconry examinations are administered at any Division office by appointment only during business hours.

(iii) An individual that fails to correctly answer at least 80 percent of the questions on the exam may retake the exam after a minimum 14-day period.

(vi) An individual that correctly answers at least 80 percent of the questions on the exam has up to 1 year from the exam date to submit application for a falconry COR.

(vii) An individual may only attempt the falconry exam three times in a calendar year.

(g) An applicant's facilities and equipment must pass inspection by the Division under R657-20-6 before a falconry COR can be issued.

(2) Possession of Raptors at the Apprentice Class.

(a) An Apprentice Class falconer may not take or possess:

(i) any raptor taken from the wild as an eyas;

(ii) any federally listed threatened or endangered species;

(iii) any wild caught, captive-bred, or hybrid eagles;

(iv) any wild-caught species taken in Utah when that bird is listed as a Bird of Conservation Concern ("BCC") by the Service for the Bird Conservation Region ("BCR") area where it is taken, as depicted on the Division's website at utah.falconry.gov;

(v) any hybrid raptor; or

(vi) any imprinted raptor.

(b) If not otherwise prohibited by R657-20-9(2)(a), an Apprentice Class falconer may take or possess any passage age raptor that is wild-caught, captive-bred, or acquired through legal transfer listed below:

(i) Northern Harrier (*Circus cyaneus*);

(ii) Sharp-shinned Hawk (*Accipiter striatus*);

(iii) Cooper's Hawk (*Accipiter cooperii*);

(iv) Northern Goshawk (*Accipiter gentilis*);

(v) Harris's Hawk (*Parabuteo unicinctus*);

(vi) Common Black-Hawk (*Buteo gallus anthracinus*);

(vii) Red-tailed Hawk (*Buteo jamaicensis*);

(viii) Rough-legged Hawk (*Buteo lagopus*);

(ix) Ferruginous Hawk (*Buteo regalis*);

(x) American Kestrel (*Falco sparverius*);

(xi) Merlin (*Falco columbarius*);

(xii) Prairie Falcon (*Falco mexicanus*);

(xiii) Gyrfalcon (*Falco rusticolus*);

(xiv) Peregrine Falcon (*Falco peregrines*), except an Apprentice may only possess non-imprint Peregrine Falcons; and

(xv) Great Horned Owl (*Bubo virginianus*).

(c) An Apprentice Class falconer may possess no more than one (1) raptor for use in falconry.

(c) Another falconry permittee may capture a wild raptor in compliance with R657-20-13 and transfer the raptor to an Apprentice Class falconer if the Apprentice Class falconer may lawfully possess that raptor.

R657-20-10. Apprentice Class Sponsor.

(1) Applicants for an Apprentice Class falconry COR must have a sponsor to mentor and assist the Apprentice Class falconer in the following activities:

(a) husbandry and training of raptors held for falconry;

(b) relevant wildlife laws and regulations; and
 (c) determining what species of raptor is appropriate for the Apprentice to possess.

(2) The person applying for an Apprentice Class falconry COR must provide the Division with a letter from their chosen sponsor stating that sponsor's willingness to serve as a sponsor for the Apprentice Class falconer.

(3) Requirements of an Apprentice Class Sponsor.

(a) Any person sponsoring an Apprentice under the age of 18, other than the minor's parent or legal guardian, must be approved in writing by the minor's parent or legal guardian and submitted to the Division before being designated as the minor's sponsor; and

(b)(i) a sponsor must be a Master Class Falconer who holds a valid Utah Falconry COR; or

(ii) be a General Class Falconer who is at least 18 years of age, has no less than two (2) years experience at the General Class falconer level, and who holds a valid Utah falconry COR.

(4) Unless approved in writing by the Division director or designee, the sponsor cannot reside:

(a) greater than a 100 mile distance from the Apprentice; or

(b) outside of Utah so long as the falconer has a valid falconry permit at the General or Master Class level.

(5)(a) Apprentice Class falconers that change or terminate sponsors must notify the Division in writing and provide a letter from the new sponsor showing compliance with the requirements listed in R657-20-10(3) and (4).

(b) In the event sponsorship is terminated, the holder of an Apprentice Class falconry COR must notify the Division and obtain a new sponsor within 30 calendar days of termination.

R657-20-11. General Class Falconer.

(1) General Class falconer requirements.

(a) Applicants for a General Class falconry COR must be at least 16 years of age.

(b) Applicants for a General Class falconry COR who are under 18 years of age must have a parent or legal guardian sign their application.

(c) The parents or legal guardian of a minor General Class falconer under the age of 18 are legally responsible for the activities of their child.

(d) New General Class applicants must submit a request for class upgrade to the Division in writing or via email at falconry@utah.gov, and include a document from their sponsor stating that the General Class applicant has practiced falconry at the Apprentice Class falconer level or equivalent for at least two (2) years, including maintaining, training, flying, and hunting raptors for at least four (4) months in each separate 12-consecutive month period.

(i) For purposes of this Subsection, two (2) years means two (2) separate 12-consecutive month periods, beginning when the COR is issued.

(ii) A General Class applicant may not substitute any falconry school program or education to shorten the minimum period of two (2) years at the Apprentice level.

(iii) Evidence that a General Class applicant has had a valid General Class level falconry license or permit in another state for at least two (2) years may be substituted for the Apprentice Class falconry COR requirement.

(2) Possession of raptors at the General Class.

(a) A General Class falconer may not take or possess:

(i) any federally listed threatened or endangered species, unless otherwise authorized by a federal take permit; or

(ii) any wild caught, captive-bred, or hybrid Bald Eagle, Golden Eagles, White-tailed Eagle or Stellar's Sea-eagle.

(b) A General Class falconer wishing to possess any of the following raptors must first obtain an authorization from the Division by providing the information required in R657-20-

12(2)(d)(i) and (ii):

(i) Bonelli's Eagle (*Aquila fasciata*);

(ii) Steppe Eagle (*Aquila nipalensis*);

(iii) Tawny Eagle (*Aquila rapax*);

(iv) African Hawk-Eagle (*Aquila spilogaster*);

(v) Verreaux's Eagle (*Aquila verreauxii*);

(vi) Crested Hawk-Eagle (*Nisaetus cirrhatus*);

(vii) Mountain Hawk-Eagle (*Nisaetus nipalensis*);

(viii) Martial Eagle (*Polemaetus bellicosus*);

(ix) Harpy Eagle (*Harpia harpyja*); and

(x) Eurasian Eagle-Owl (*Bubo bubo*).

(c) A General Class falconer may possess no more than three (3) wild-caught eyas, passage, or haggard age raptors, captive-bred raptors, or hybrid raptors, or any combination thereof.

R657-20-12. Master Class Falconer.

(1) Master Class falconer requirements.

(a) Applicants for a Master Class falconry COR must have five (5) years of experience practicing falconry with raptor(s) held under their own state, tribal, or territorial falconry COR or permits at the General Class level.

(i) For the purposes of this Subsection, five (5) years of experience means maintaining, training, flying, and hunting the raptor(s) for at least four (4) months in each of five (5) separate 12-month periods, beginning when the COR is issued.

(ii) Evidence that the applicant has had a valid General Class level falconry license or permit in another state for at least five (5) years may be substituted for the General Class falconry COR requirement.

(iii) If an applicant has held falconry raptor(s) on an extended temporary basis, that experience may qualify for purposes of these requirements.

(2) Possession of Raptors at the Master Class.

(a) A Master Class falconer may not take or possess:

(i) any federally listed threatened or endangered species, unless otherwise authorized by a federal take permit; or

(ii) any wild caught, captive-bred, or hybrid Bald Eagles.

(b) A Master Class falconer may take or possess a Golden Eagle (*Aquila chrysaetos*), if:

(i) the bird is obtained through legal transfer or is wild-caught from a livestock or wildlife depredation area described in R657-20-13(15); and

(ii) the falconer satisfies the conditions found R657-20-12(d).

(c)(i) A Master Class falconer may possess no more than 5 wild-caught raptors for use in falconry.

(ii) A Master Class falconer may possess any number of captive-bred raptors, provided:

(A) approved facilities are available for the number of birds possessed; and

(B) all captive-bred raptors in possession are trained and used in the sport of falconry.

(d) A Master Class falconer may obtain an authorization from the Division to possess a Golden Eagle, White-tailed Eagle, Stellar's Sea-eagle, or other species listed in R657-20-11(2)(b) by providing the following:

(i) a written statement documenting the experience of the Master Class falconer in handling large raptors, including information about the species handled and the type and duration of activities in which the experience was obtained; and

(ii) at least two (2) letters of reference from individuals with experience in handling or flying large raptors such as eagles, Ferruginous Hawks, Northern Goshawks, or Great Horned Owls addressing:

(A) a concise history of the author's experience with large raptors, which can include but is not limited to, handling of raptors held by zoos, rehabilitating large raptors, or scientific studies involving large raptors; and

(B) the Master Class falconer's ability to care for the species listed in R657-20-11(2)(b) and fly them in falconry.

R657-20-13. Acquiring Raptors for Falconry.

(1) Licensed falconers wishing to take raptors from the wild for falconry must purchase a Raptor Capture Permit from the Division.

(2) A Raptor Capture Permit is valid for one (1) wild raptor authorized for possession in accordance with the restrictions and limitations of this rule.

(3) A licensed falconer may not take more than two (2) raptors from the wild each calendar year for falconry purposes.

(4) Raptor Capture Permits are non-transferable and non-assignable and can only be used by the person specified on the permit, except another person can assist the permit holder pursuant to Section R657-20-15.

(5) The Raptor Capture Permit and falconry COR (or legible copies thereof) must be in the possession of the permittee while pursuing, capturing or attempting to capture a wild raptor.

(6) (a) On an annual basis, the Falconry Program Coordinator shall determine the available take of peregrine falcons and raptor species listed on the most recent edition of the Utah Sensitive Species List.

(b) Notice of any limitations on the take of Peregrine Falcons and sensitive raptor species shall be available by February 1 of each year and posted on the Division's website.

(c) The application period for take of Peregrine Falcons and sensitive raptor species is the first business day in February through the last business day in March.

(d) If the number of applications received exceeds the available take, then the Division will conduct a drawing for each species.

(e) Individuals who draw a capture permit for a given species are placed on a one (1) year waiting period.

(f) Individuals on a waiting period may still apply in a drawing, be placed in the drawing order, and receive a capture permit if all applicants not on a waiting period have been given the opportunity to accept an available capture permit.

(7) Haggard age raptors may not be taken from the wild for falconry, with the exception that General and Master Class falconers may take a haggard American Kestrel from the wild between August 15th and February 15th annually.

(8) Any raptor taken from the wild for falconry is considered a "wild" raptor for the balance of the raptor's life, regardless of the length of captivity or the raptor's transfer to another permittee or permit type.

(9) A licensed falconer who wishes to take a raptor from the wild must meet all state and tribal requirements in this rule for capture of wild raptors for falconry.

(10) A permittee may not purchase, sell, trade, or barter a wild raptor.

(11) While trapping, falconers shall not retain and transport more than one (1) captured wild raptor per capture permit.

(12) Taking of wild raptors is prohibited within the boundaries of all National and State Parks in Utah.

(13)(a) A raptor must be taken from the wild using traps or nets that minimize the potential of physical injury and unnecessary stress to the raptor, including, but not limited to bal-chatri, dho-gazza, harness-type, phi trap, bow net traps, or other trapping devices that are humane and acceptable as commonly used in falconry trapping procedures.

(b) Trapping devices must be constantly attended while in use.

(14) A raptor taken from the wild may be transferred to another permittee under the following conditions:

(a) The captured raptor will count as one (1) of the raptors allowed for take from the wild in the calendar year it was taken by the capturing falconer; and

(b) The transferred wild raptor will not count as a capture by the recipient.

(15)(a) A permittee may not intentionally capture wild raptor species for falconry that their classification as a falconer does not allow them to possess.

(b) If a permittee captures a wild raptor he or she is not allowed to possess, it must be released immediately.

(16) A General or Master Class falconer may take no more than one (1) raptor from the wild each year which belongs to a species listed as threatened or endangered under the federal Endangered Species Act if allowed under 50C CFR part 17, and only if a federal endangered species permit is obtained before taking the bird.

(17)(a) A General or Master Class falconer may take eyas raptors from a nest or aerie only during the seasons specified for taking eyas raptors in Subsection (19).

(b) At least one (1) young must be left in any nest or aerie from which an eyas is taken.

(c) Removal of young is prohibited from a nest or aerie that contains only one (1) eyas.

(18) An Apprentice, General or Master Class falconer may take passage age raptors from the wild only during the seasons specified for taking passage age raptors in Subsection (19).

(19) Periods for Allowable Take of Raptors From the Wild.

(a) Eyas or passage age raptors of any allowable Strigiform species may be taken from March 1 through November 30.

(b) Eyas or passage age raptors of any allowable Accipitriform and Falconiform species, except Peregrine Falcon and Golden Eagle, may be taken January 1 through December 31.

(c) Notwithstanding Subsection (19)(b):

(i) Passage age raptors that fledged from the prior year may not be taken after March 1st; and

(ii) Passage age Gyrfalcons may be taken at any time.

(d) The Peregrine Falcon take season begins annually on May 1st and ends on August 31st.

(i) A Peregrine Falcon eyas may not be removed from its aerie prior to 10 days of age.

(ii) Peregrine Falcon aeries may not be entered when young are 28 days or more of age.

(e) Licensed falconers may take any raptor from the wild if take is authorized under this rule and possession is authorized for their class level.

(f)(i) A wild caught raptor, except Peregrine Falcon, that is banded with a Federal Bird Banding Laboratory aluminum band may be taken, provided the Federal Bird Banding Laboratory is notified of the removal of the banded raptor from the wild. Banded Peregrine Falcons must be promptly released and reported to the Federal Bird Banding Laboratory at www.reportband.gov.

(ii) The Federal Bird Banding Laboratory aluminum band may be removed if the raptor is to be retained, after notifying the Federal Bird Banding Laboratory.

(iii) Capture of any raptor that is marked with a seamless metal band, a transmitter, or any other item identifying it as a falconry bird must be reported to the Division no more than 5 business days after the capture.

(iv) Capture of any raptor that is marked with any other band, research marking, or research transmitter attached to it must be promptly reported to the Federal Bird Banding Laboratory at www.reportband.gov or 1-800-327-2263.

(20) Nonresident Take of Wild Raptors.

(a) A nonresident falconer may not take any raptor from the wild without first obtaining a Nonresident Raptor Capture Permit from the Division.

(b) Nonresidents must show proof of a valid federal falconry permit or falconry license issued by their state of residency to purchase a Nonresident Raptor Capture Permit.

(c) Nonresident take of raptors is subject to all other applicable regulations set forth in this rule.

(21) Special provisions for take of wild peregrine falcons.

(a) Only General and Master Class falconers may take wild eyas or passage age peregrine falcons as provided in this rule.

(e) The areas open for taking eyas and passage age peregrine falcons will be designated annually by the Division Director or designee.

(f) A Peregrine Falcon that is marked with a with a Federal Bird Banding Laboratory aluminum band and/or a research band such as a colored band with alphanumeric codes or some other research marking attached must be immediately released and reported within five (5) business days to the Federal Bird Banding Laboratory at www.reportband.gov.

(22) Special provisions for take of wild Golden Eagles.

(a) A Master Class falconer with a COR to take Golden Eagles may possess no more than three (3) from the wild, subject to the requirements in 50 CFR 21 and Section R657-20-12.

(b)(i) A Master Class Falconer that is authorized to take Golden Eagles may take no more than two (2) Golden Eagles from the wild in any calendar year and only in a livestock or wildlife depredation area during the time the depredation area declaration is in effect.

(ii) The establishment, boundaries, and duration of a livestock or wildlife depredation area in Utah are as determined by U.S.D.A. Wildlife Services and the U. S. Fish and Wildlife Service in Lakewood, CO, or on request by the Governor to the Director of the Service (50 CFR 22.31).

(iii) A Master Class falconer authorized to take Golden Eagles for use in falconry may capture an immature or subadult Golden Eagle only in a livestock or wildlife depredation area during the time the depredation area is in effect in Utah.

(iv) A Master Class Falconer may capture a nesting adult Golden Eagle, or take an eyas from its nest, in a livestock or wildlife depredation area if a biologist representing the agency responsible for declaring the depredation area has determined that the parent adult eagle is preying on livestock or wildlife.

(v) A government employee who has trapped a Golden Eagle under Federal, State, or tribal permit may transfer the eagle to a Master Class falconer that is authorized to possess Golden Eagles if the eagle cannot be released in an appropriate location.

(vi) A Master Class Falconer authorized to take a Golden Eagle for falconry must contact USDA, Wildlife Services or the U. S. Fish and Wildlife Service in Lakewood, CO to determine the establishment and location of a livestock or wildlife depredation area in Utah and comply with the provisions of 50 CFR 21.29(e)(3)(ii)(E) regarding notification of law enforcement prior to initiating trapping activities.

(vii) The Division does not provide livestock or wildlife depredation area information.

(viii) The Master Class falconer must have permission from the private landowner to capture a Golden Eagle on private lands.

(23) Other special provisions for obtaining raptors for falconry

(a) A permittee may receive assistance from another individual in capturing a wild raptor, but the permittee must be present at the capture site.

(b) Regardless of the assistance of another person in capturing a wild raptor:

(i) The permittee is always considered to be the individual who removes the bird from the wild; and

(ii) The permittee is legally responsible for complying with the reporting requirements for capturing a raptor from the wild, as provided in Subsection (1).

(c)(i) A permittee with a long-term or permanent physical impairment that prevents their attendance at the capture of a

raptor for use in falconry, or is otherwise unable to be present at the immediate location where the raptor is taken from the wild, may contact a General or Master Class falconer only to capture a raptor on their behalf.

(ii) The impaired permittee is legally responsible for complying with the reporting requirements for capturing a raptor from the wild, as provided in Subsection (1).

(iii) The raptor will count against the take of wild raptors that the impaired permittee is allowed in any year.

(iv) The raptor will not count as one (1) of the two (2) raptors the General or Master Class falconer who offers assistance is allowed to capture in any year.

(v) The raptor will not count as being taken from the wild by the permittee acting on behalf of the impaired permittee.

(d) Individuals authorized to do so may sell, purchase, or barter, or offer to sell, purchase, or barter captive-bred raptors marked with seamless bands to other permittees who are legally authorized to possess the raptor.

(e) A permittee may transfer a wild-caught raptor to another permittee who is legally authorized to possess the raptor, provided there is no pecuniary consideration for the transfer.

(f) The number of wild caught or captive-bred raptors transferred to a permittee may not exceed the established possession limit for each permit class.

(g)(i) A licensed falconer may acquire directly from a rehabilitator a raptor of any age or species that the falconer is permitted to possess.

(ii) A wild raptor acquired for falconry from a rehabilitator will count as one (1) of the raptors the falconer is allowed to take from the wild that calendar year.

R657-20-14. Raptors Injured Due to Falconer Trapping Efforts.

(1) Falconers that injure a raptor during trapping efforts are responsible for the costs of care and rehabilitation of the injured raptor.

(2) An injured raptor retained by the permittee must be placed on the permittee's falconry permit.

(3) The injured raptor must be treated by a veterinarian or a permitted wildlife rehabilitator.

(4) The injured raptor must be immediately transported to a veterinarian, a permitted wildlife rehabilitator, or an appropriate wildlife agency employee.

(5) The injured raptor will not count against the permittee's allowed take or the permittee's possession limit.

R657-20-15. Recapture of Falconry Raptors.

(1) A falconry raptor that has been lost may be recaptured at any time without the need to purchase a Raptor Capture Permit.

(2) Recapture of an escaped raptor is not considered to be the taking of a raptor from the wild.

(3) A raptor wearing falconry equipment or a lost or escaped captive-bred raptor may be recaptured at any time by any other permitted falconer, even if the permittee performing the recapture is not allowed to possess the species.

(4)(a) A recaptured raptor will not count against a permitted falconer's possession limit, nor will its recapture from the wild count against the permitted falconer's replacement limit.

(b) A recaptured falconry raptor must be returned to the permittee who lost it if that individual may legally take possession.

(c) Disposition of a recaptured falconry raptor where the permittee's legal authority to possess the bird is in question will be determined by the Division Director or designee.

(d) A recaptured falconry raptor temporarily held for return to the permittee who lost it will not count against the

possession or replacement limit on take of raptors from the wild if the individual temporarily holding the raptor has reported the recapture to the Division.

R657-20-16. Flying a Hybrid Raptor in Falconry.

(1) When flown free, a hybrid raptor must have at least two (2) attached radio transmitters for tracking.

R657-20-17. Hacking of Falconry Raptors and other Training Techniques.

(1) Only a General or Master Class Falconer may hack a falconry raptor or raptors.

(2) Raptors at hack count against possession limits and must be a species authorized for possession.

(3) Hybrid raptors at hack must have two (2) attached and functioning radio transmitters.

(4)(a) Raptors may not be released to hack near the nesting area of a federally threatened or endangered bird species or in any other location where the raptor is likely to harm a federally listed threatened or endangered animal species that might be disturbed or taken by the raptor at hack.

(b) Information on federally-listed species can be obtained from the Service.

(5) The Division must be notified prior to hacking a falconry raptor.

(6) Use of other falconry training or conditioning techniques.

(a) Other acceptable falconry practices may be used, such as the use of tethered flying, lures, balloons, or kites in training or conditioning raptors for falconry.

(b) Falconry raptors may be flown at pen-raised animals or at bird species not protected under this rule or the Migratory Bird Treaty Act, so long as those activities otherwise comply with Titles 4 and 23 of Utah Code.

R657-20-18. Permission to Conduct Falconry Activities on Public or Private Lands.

(1) A falconer must comply with all applicable Federal, State, local, or tribal laws regarding falconry activities, including hunting, on private, public, and tribal lands.

(a) All falconry activities shall be conducted consistent with the trespass requirements in Section 23-20-14.

(b) A person may not engage in any falconry activity on Tribal trust lands without authorization.

(2) Raptor training is not allowed on state waterfowl and wildlife management areas without authorization.

(3) Practicing the sport of falconry without permission is prohibited on all National Parks in Utah

(4) Practicing the sport of falconry without permission is prohibited on all Utah State Parks.

(5) Unless specifically authorized by the U.S. Fish and Wildlife Service, practicing the sport of falconry on National Wildlife Refuges is prohibited.

R657-20-19. Practicing Falconry in the Vicinity of a Federally Listed Threatened or Endangered Animal Species.

(1) Individuals practicing falconry must ensure that such activities do not result in the take of federally listed threatened or endangered wildlife.

(2) Under the Federal Endangered Species Act:

(a) "Take" means "to harass, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct".

(b) "Harass" means any act that may injure wildlife by disrupting normal behavior, including breeding, feeding, or sheltering; and

(c) "Harm" means an act that actually kills or injures wildlife.

(3) Information about threatened or endangered species

that may occur in Utah is available by contacting the Service or the Division.

R657-20-20. Releasing a Falconry Raptor to the Wild.

(1)(a) A raptor that is non-native to the State of Utah or that is a hybrid of any kind may not be permanently released into the wild.

(b) A raptor that is non-native to the State of Utah or that is a hybrid of any kind may be transferred to another falconry permittee authorized for possession.

(2)(a) A raptor that is native to the State of Utah and captive-bred may not be permanently released into the wild without prior authorization from the Division.

(b) Once authorization for release of a captive-bred native raptor is received, the raptor must be hacked to the wild at an appropriate time of year and at an appropriate location.

(c) The falconry or captive-bred band must be removed and release of the bird reported to the Division in accordance with Section R657-20-21.

(3)(a) If the species to be released is native to the State of Utah and was taken from the wild, the raptor may be released only at an appropriate time of year and at an appropriate location.

(b) If the raptor is banded, the band must be removed and release of the bird reported to the Division in accordance with Section R657-20-21.

R657-20-21. Reporting Requirements.

(1) All activities, including wild take, acquisition, transfer, exchange, band or reband or microchip implant, loss of bird if not recovered within 30 days, recapture, injuries, and theft of any falconry raptor must be reported to the Division within 10 business days of the date of the event, as follows:

(a) Submit to the Division a completed paper Form 3-186a by mail or email at falconry@utah.gov; and

(b) Enter the required information in the electronic database located at <http://permits.fws.gov/186A> if it is functional.

(2) A permittee must retain copies of all electronic database submissions documenting take, transfer, loss, rebanding or micro chipping or any other transaction for each falconry raptor for up to five (5) years after the given transaction or event has taken place.

(3)(a) Date of capture, sex of the raptor, and location of the capture in UTM or latitude/longitude must be recorded on the Raptor Capture Permit for all species.

(b) Nest locations are held for use by the Division and are subject to state records laws.

(4) By December 31 of each year, the Division will provide each resident falconer with an annual report form.

(5) All Resident falconers holding a valid falconry COR must submit a completed falconry Annual Report to the Division by January 31 of each year.

R657-20-22. Unintentional Take of Protected Wildlife by a Falconry Raptor.

(1) A falconry raptor may be allowed to feed on a prey animal taken unintentionally, provided the prey animal is not taken into the falconer's possession.

(2) Unintentional take of any federally listed threatened or endangered species must be reported to the Division and the U. S. Fish and Wildlife Ecological Services Field Office in Salt Lake City within 48 hours of the take event.

(3) Unintentional take of any Utah protected wildlife must be reported to the Division within 48 hours of the take event.

R657-20-23. Banding or Tagging Raptors Used in Falconry.

(1)(a) A falconer who has captured or acquired a wild Northern Goshawk, wild Harris's hawk, wild Peregrine Falcon,

or wild Gyrfalcon must band the raptor with a permanent, nonreusable, black-colored numbered Service leg band.

(b) A falconer must contact the Division for information on obtaining and disposing of bands.

(c) In addition to banding the raptor, a falconer may also purchase and implant an ISO (International Organization for Standardization)-compliant (1234.2 kHz) implantable microchip.

(d) New and replacement band or any required microchip information must be reported to the Division pursuant to Section R657-20-21.

(2)(a) Raptors bred in captivity must be banded with a Service seamless metal band described in 50 CFR 21 Section 21.30, or plastic, numbered Service yellow band.

(b) Unbanded raptors, or black, or yellow banded raptors may not be sold, traded or bartered in any way.

(c) In addition to banding the raptor, a falconer may also purchase and implant an ISO (International Organization for Standardization)-compliant (1234.2 kHz) implantable microchip.

(d) Removal or loss of a seamless band must be reported to the Division within 10 business days of the event and a replacement non-reusable band attached to the raptor.

(e) New and replacement band or any required microchip information must be reported to the Division pursuant to Section R657-20-21.

(3)(a) In the event a non-reusable band is removed or lost from a banded raptor, the removal or loss of the band must be reported to the Division pursuant to Section R657-20-21 and a replacement band requested.

(b) Immediately upon rebanding the raptor, the required information must be submitted to the Division pursuant to Section R657-20-21.

(4) A band may not be altered, defaced, or counterfeited.

(5)(a) Exemptions for banding of raptors will be considered on a case-by-case basis if there are documented health or injury problems for a raptor that are caused by the band.

(b) A copy of the exemption paperwork must be kept by the permittee when transporting or flying the raptor.

(c) If the raptor is a wild northern goshawk, wild Harris's hawk, wild peregrine falcon, or wild gyrfalcon, the band may be replaced with an ISO-compliant microchip.

(d) Substituting a microchip for a band on a wild Goshawk, wild Harris's Hawk, wild Peregrine Falcon, or wild Gyrfalcon will not be authorized unless it has been demonstrated that a band causes an injury or a health problem for the raptor.

R657-20-24. Importation Requirements for Residents and Nonresidents.

(1) If an individual possesses a falconry COR from the State of Utah for the possession of a raptor, that individual is not required to obtain any other COR from the Division to import a raptor brought into Utah from another state when the raptor is imported and used for falconry purposes on a permanent basis.

(2) Importation of a raptor used for any purposes other than falconry is governed by Rule R657-3.

(3) A raptor imported into Utah is required to satisfy all import and health requirements of the Utah Department of Agriculture and Food, Animal Health Office.

(4) Any raptor brought into the state on a permanent basis must be reported to the Division pursuant to Section R657-20-21.

R657-20-25. Falconry Meets or Trials.

(1) Falconers participating in falconry meets or trials must possess a valid falconry license and federal falconry permit, if applicable.

(2) A falconry meet license is not required for participation

in a falconry trial.

(3) A falconry meet or trial may not be held on state waterfowl and wildlife management areas from April 1 through August 15, except in those areas approved by the Division Director or designee.

(4) An organizer of a falconry meet must obtain prior approval from the Division Director or designee to hold a falconry meet in Utah by submitting a written request to falconry@utah.gov.

(5) A nonresident entering Utah to participate in the sport of falconry at an organized meet must be 12 years of age or older and must obtain a nonresident falconry meet license or non-resident hunting license, if hunting protected wildlife.

(6) A non-resident falconry meet license may be obtained by completing an application and submitting the application and appropriate fees to the Division.

(7) A non-resident falconry meet license is valid only for nonresidents and only for ten (10) consecutive calendar days as designated on the license.

(8) The holder of a nonresident falconry meet license may engage in the sport of falconry on protected wildlife during the specified ten (10) day period in accordance with the provisions of this rule.

(9) A nonresident participating in an organized meet must meet the importation requirements in R657-20-24 for each raptor brought into the state.

R657-20-26. Use of Pen-Reared Game Birds for Meets, Trials and Training.

(1) Any falconer using pen-reared game birds for meets, trials or training must have an invoice or bill of sale or a copy thereof in their possession showing lawful personal possession or ownership of such birds.

(2) Pen-reared game birds may be held in possession no longer than 60 calendar days unless the person possessing the pen-reared game birds first obtains a private aviculture COR as provided in Rule R657-4.

(3)(a) Each pen-reared game bird must be marked with an aluminum leg band or other permanent marking before being released except as provided in Subsection (d).

(b) Aluminum leg bands may be purchased at any Division office.

(c) The aluminum leg band or other permanent marking must remain attached to the pen-reared game bird.

(d) Each pen-reared game bird used on a commercial hunting area, as defined in R657-22, may be released without marking.

(4) Pen-reared game birds used for a meet may be released only on the property specified and only during the dates approved for the falconry meet.

(5) Released pen-reared game birds may be taken using falconry raptors, as follows:

(a) By the individual who released the pen-reared game birds, or by any individual participating in the meet; and

(b) Only during the approved dates of the meet.

(6) Once released, any pen-reared game birds that leave the property where the meet is held or are not retrieved at the conclusion of the meet become the property of the State of Utah and may not be recaptured or taken, except as prescribed in the Upland Game or Waterfowl proclamations of the Wildlife Board.

(7) Pen-reared game birds used for training raptors or for a trial that escape or are not recovered on the day of the training or trial, or pen-reared game birds that escape, become property of the State of Utah and may not be recaptured or taken, except as prescribed in the Upland Game and Waterfowl proclamations of the Wildlife Board and elsewhere in this rule.

R657-20-27. Use of Feathers and Carcasses.

(1)(a) Feathers that a falconry bird or birds molt may be used for imping.

(b) Flight feathers for each species of raptor currently in possession or previously held may be kept for imping for as long as needed by a falconer with a valid falconry COR.

(c) Feathers for imping purposes may be received from or provided to other licensed falconers, wildlife rehabilitators, or propagators in the United States.

(d) Licensed falconers may not buy, sell, or barter molted raptor feathers.

(e) Molted feathers from a falconry bird, except Golden Eagle feathers, may be donated to any person or institution with a valid permit for possession.

(f) Except for primary or secondary wing feathers or rectrix (tail) feathers from a Golden Eagle, a falconer is not required to gather feathers that are molted or otherwise lost by a falconry bird held under a valid COR.

(g) Molted feathers may be left where they fall, stored for imping, or destroyed.

(h)(i) A licensed falconer possessing a Golden Eagle must collect any molted flight feathers and rectrices.

(ii) Collected Golden Eagle feathers that are not to be retained for imping must be sent to the National Eagle Repository at U.S. Fish and Wildlife Service, National Eagle Repository, Rocky Mountain Arsenal, 6550 Gateway Road, Building 128, Commerce City, Colorado 80022 (303-287-2110).

(j) Once a falconry COR expires and is not renewed or is revoked, the falconer must donate molted feathers of any species of falconry raptor to any person or institution authorized by permit to acquire and possess the feathers.

(k) Molted feathers that are not donated must be burned, buried, or otherwise destroyed.

(2) Disposition of carcasses of falconry birds that die.

(a) The entire carcass of a Golden Eagle held for falconry that dies, including all feathers, talons, and other parts, must be sent to the National Eagle Repository at U.S. Fish and Wildlife Service, National Eagle Repository, 6550 Gateway Road, Rocky Mountain Arsenal, Building 128, Commerce City, Colorado 80022 (303-287-2110).

(b) The body or feathers of any other species of falconry raptor may be donated to any person or institution authorized by permit to acquire and possess raptor parts or raptor feathers.

(c) A falconry raptor, except a Golden Eagle, that was either banded or micro chipped prior to its death may be retained by the licensed falconer.

(d)(i) The body of the raptor may be kept so that the feathers are available for imping, or the body may be mounted by a taxidermist.

(ii) The mounted raptor may be used in conservation education programs.

(iii) If the falconry raptor was banded, the band must be left in place on the mounted raptor body.

(iv) If the falconry raptor has an implanted microchip, the microchip must be left in place on the mounted raptor body.

(e) The body and feathers of a deceased falconry raptor that are not donated or retained must be burned, buried, or otherwise destroyed within 10 calendar days of the death of the bird or after final examination by a veterinarian to determine cause of death.

(f) A licensed falconer that does not wish to donate or destroy the flight feathers of a deceased raptor or have the body mounted by a taxidermist, may possess the flight feathers for as long as they possess a valid falconry COR, provided:

(i) the feathers are not be bought, sold, or bartered; and

(ii) the paperwork documenting lawful possession of the deceased raptor is retained.

R657-20-28. Other Uses of Raptors.

(1) Transfer of wild raptors captured for falconry to other permitted uses.

(a) A wild-caught falconry raptor may be transferred to a person authorized to possess raptors for propagation purposes only after the raptor has been used in falconry for at least:

(i) 12 months from the date of capture for a Sharp-shinned Hawk, Cooper's Hawk, Merlin, or American Kestrel; and

(ii) 24 months from the date of capture for all other falconry raptors.

(b) The time periods imposed in Subsection (1)(a) for transferring a wild-caught falconry raptor to a person authorized to possess raptors for propagation purposes may be waived by the Division Director or designee if the raptor has been injured and a veterinarian or permitted wildlife rehabilitator has determined that the raptor can no longer be flown for falconry.

(c) In order to permanently transfer an injured raptor to a propagation permit, the falconer must provide the Division and the Federal Migratory Bird Permits Office that administers propagation permits a certification from the treating veterinarian or rehabilitator stating that the raptor is injured and cannot be used in falconry.

(d) Upon transfer of a wild raptor to a propagation permit, the falconer must provide a copy of the 3-186A form documenting acquisition of the raptor by the propagator to the Division and the Federal Migratory Bird Permits Office that administers propagation permits.

(2) Transfer of captive-bred falconry raptors to other permitted uses.

(a) Captive-bred falconry raptors may be transferred to another person if the recipient is authorized for possession.

(3) Use of raptors possessed for falconry in captive propagation.

(a) Raptors possessed for falconry may be bred in captivity if the falconer or the person overseeing the propagation has the necessary permits and facilities.

(b) Formal transfer of a raptor from a falconry permit to a captive propagation permit is required if the raptor is to be permanently used for propagation.

(c) Formal transfer of a raptor from a falconry permit to a captive propagation permit is not required if the raptor is used for propagation less than eight (8) months in a year.

(d) The licensed propagator must have a signed and dated statement from the falconer authorizing the temporary possession, plus a copy of the falconer's original FWS Form 3-186A for that raptor.

(4) Use of falconry raptors in conservation education programs.

(a) A General or Master Class falconer may use a falconry raptor in conservation education programs presented in public venues.

(b) A Federal education permit is not required to conduct conservation education activities using a falconry raptor held under a Utah falconry COR.

(c) In order to permanently transfer an injured raptor to an education permit, the falconer must provide the Division and the Federal migratory bird permits office that administers education permits a certification from the treating veterinarian or rehabilitator stating that the raptor is injured and cannot be used in falconry.

(d) Conservation programs may be presented by an Apprentice Falconer who is accompanied by their General or Master Class sponsor.

(e) Raptors used to present conservation programs must primarily be used for falconry.

(f) A falconer may charge a fee for presentation of a conservation education program, however the fee charged may not exceed the amount required to recoup costs of presenting the conservation education program.

(g) When presenting conservation education programs, the

falconer must provide information about the biology, ecological roles, and conservation needs of raptors and other migratory birds, although not all of these topics must be addressed in every presentation.

(h)(i) A falconer may not give presentations using a falconry raptor that do not address falconry and conservation education.

(ii) The falconer is responsible for all liability associated with conservation education activities undertaken.

(5) Other educational uses of falconry raptors.

(a) A falconer may allow photography, filming, or other similar uses of falconry raptors to make movies or other sources of information on the practice of falconry or on the biology, ecological roles, and conservation needs of raptors and other migratory birds.

(b) A falconer may not be paid or otherwise compensated for such activities.

(c) A falconer may not use falconry raptors or permit the use of falconry raptors to make movies, commercials, or in other commercial ventures that are not related to the practice of falconry or the biology, ecological roles, and conservation needs of raptors and other migratory birds.

(c) Falconry raptors may not be used for:

(i) Commercial entertainment for advertisements;

(ii) Promoting or endorsing any business, company, corporation, or other organization; or

(iii) Promoting or endorsing any product, merchandise, good, service, meeting, or fair, except for products related directly to falconry, such as hoods, telemetry equipment, giant hoods, perches, and materials for raptor facilities.

(6) Assisting in rehabilitation of raptors in preparation for release.

(a) A General or Master Class Falconer may assist a permitted migratory bird rehabilitator in conditioning raptors in preparation for their release to the wild.

(i) The falconer may keep the raptor being rehabilitated in their facilities up to 180 calendar days.

(ii) The rehabilitator must provide the falconer with a letter or form that identifies the raptor and explains that the falconer is assisting in the rehabilitation of the raptor to be released.

(iii) Facilities where the raptor will be temporarily housed must adhere to standards outlined in Sections R657-20-6 of this rule.

(iv) The falconer is not required to add any raptor possessed for rehabilitation to their COR; the raptor will remain under the permit of the rehabilitator.

(v) The falconer must permanently release any raptor capable of sustaining itself in the wild or return it to the rehabilitator within the 180-day timeframe in which the rehabilitator is authorized to possess the raptor, unless the Division authorizes the falconer to retain the bird for longer than 180 calendar days.

(7) Using falconry raptors in abatement activities.

(a) Abatement activities may only be conducted with captive bred raptors.

(b) A Master Class falconer may conduct abatement activities with raptors possessed for falconry and receive compensation for such activities, if the falconer is in possession of a Special Purpose Abatement Permit issued by the Service.

(c) A General Class falconer may conduct abatement activities only as a subpermittee of a Master Class falconer that possesses an abatement permit.

(d) An Apprentice Class falconer may not conduct abatement activities.

(8) A person who possesses a raptor for any purpose other than falconry, including raptor propagation, educational uses, and rehabilitation, shall obtain the appropriate authorization from the Division as provided in Rule R657-3 and the appropriate authorization from the Service.

KEY: wildlife, birds, falconry

August 21, 2017

Notice of Continuation December 6, 2016

23-17-7

50 CFR 21

R657. Natural Resources, Wildlife Resources.**R657-54. Taking Wild Turkey.****R657-54-1. Purpose and Authority.**

(1) Under authority of Sections 23-14-18 and 23-14-19 and in accordance with 50 CFR 20, 2003 edition, which is incorporated by reference, the Wildlife Board has established this rule for taking wild turkey.

(2) Specific season dates, bag and possession limits, areas open, number of permits and other administrative details that may change annually are published in the guidebook of the Wildlife Board for taking upland game and wild turkey.

R657-54-2. Definitions.

(1) Terms used in this rule are defined in Section 23-13-2.

(2) In addition:

(a) "Bait" means shelled, shucked or unshucked corn, wheat or other grain, salt or other feed that lures, attracts or entices wild turkey.

(b) "Baiting" means the direct or indirect placing, exposing, depositing, distributing, or scattering of salt, grain, or other feed that could serve as a lure or attraction for upland game to, on, or over any areas where hunters are attempting to take them.

(c) "CFR" means the Code of Federal Regulations.

(d) "Falconry" means the sport of taking quarry by means of a trained raptor.

R657-54-3. Application Procedure for Wild Turkey.

(1) Permits for wild turkey will be issued pursuant to R657-62-25.

R657-54-4. Authorized Weapons.

(1) Wild turkey may be taken only with

(a) Archery equipment, including a draw-lock, or a crossbow using broadhead tipped arrows or bolts: or

(b) a shotgun no larger than 10 gauge and no smaller than 28 gauge, firing shot sizes ranging between BB and no. 8.

R657-54-5. Shooting Hours.

(1) Wild turkey may be taken only between one-half hour before official sunrise through one-half hour after official sunset.

(a) A person must add to or subtract from the official sunrise and sunset depending on the geographic location of the state. Specific times are provided in a time zone map in the guidebook of the Wildlife Board for taking upland game and wild turkey.

R657-54-6. State Parks.

(1) Hunting of any wildlife is prohibited within the boundaries of all state park areas, except those areas designated open to hunting by the Division of Parks and Recreation in Rule R651-614-4.

(2) Hunting with rifles and handguns in park areas designated open is prohibited within one mile of all park facilities including buildings, camp or picnic sites, overlooks, golf courses, boat ramps, and developed beaches.

(3) Hunting with shotguns, crossbows or archery tackle is prohibited within one quarter mile of the above stated areas.

R657-54-7. Falconry.

Falconers may not release a raptor on wild turkeys during the spring seasons. Falconers may release a raptor on wild turkeys during the fall season, as published in the guidebook of the Wildlife Board for taking upland game and wild turkey.

R657-54-8. Live Decoys and Electronic Calls.

A person may not take a wild turkey by the use or aid of live decoys, recorded turkey calls or sounds, or electronically

amplified imitations of turkey calls.

R657-54-9. Baiting.

A person may not hunt turkey using bait, or on or over any baited area where a person knows or reasonably should know that the area is or has been baited. An area is considered baited for 10 days after bait is removed, or 10 days after bait in an area is eaten.

R657-54-10. Sitting or Roosting Turkeys.

A person may not take or attempt to take any turkey sitting or roosting in a tree.

R657-54-11. Tagging Requirements.

(1) The carcass of a turkey must be tagged before the carcass is moved from, or the hunter leaves, the site of kill.

(2) To tag a carcass, a person shall:

(a) completely detach the tag from the license or permit;

(b) completely remove the appropriate notches to correspond with:

(i) the date the animal was taken;

(ii) the sex of the animal; and

(c) attach the tag to the carcass so that the tag remains securely fastened and visible.

(3) A person may not:

(a) remove more than one notch indicating date or sex; or

(b) tag more than one carcass using the same tag.

(4) A person may not hunt or pursue turkey after any of the notches have been removed from the tag or the tag has been detached from the permit.

R657-54-12. Identification of Species and Sex.

(1) During the spring seasons the head and beard must remain attached to the carcass of wild turkey while being transported.

(2) During the fall season only the head must remain attached to the carcass of wild turkey while being transported.

R657-54-13. Use of Dogs.

(1) An individual may not use or permit a dog to harass, pursue, or take protected wildlife unless otherwise allowed for in the Wildlife Code, administrative rules issued under Wildlife Code, or a guidebook of the Wildlife Board.

(2) Dogs may be used to locate and retrieve turkey during open turkey hunting seasons.

(3) Dogs are generally allowed on state wildlife management and waterfowl management areas, subject to the following conditions.

(a) dogs are not allowed on the following state wildlife management areas and waterfowl management areas between March 10 and August 31 annually or as posted by the Division:

(i) Annabella;

(ii) Bear River Trenton Property Parcel;

(iii) Bicknell Bottoms;

(iv) Blue Lake;

(v) Browns Park;

(vi) Bud Phelps;

(vii) Clear Lake;

(viii) Desert Lake;

(ix) Farmington Bay;

(x) Harold S. Crane;

(xi) Hatt's Ranch

(xii) Howard Slough;

(xiii) Huntington;

(xiv) James Walter Fitzgerald;

(xv) Kevin Conway;

(xvi) Locomotive Springs;

(xvii) Manti Meadows;

(xviii) Mills Meadows;

- (xix) Montes Creek;
- (xx) Nephi;
- (xxi) Ogden Bay;
- (xxii) Pahvant;
- (xxiv) Public Shooting Grounds;
- (xxv) Redmond Marsh;
- (xxvi) Richfield;
- (xxvii) Roosevelt;
- (xxviii) Salt Creek;
- (xxix) Scott M. Matheson Wetland Preserve;
- (xxx) Steward Lake;
- (xxxii) Timpie Springs;
- (xxxiii) Topaz Slough;
- (xxxiv) Vernal; and
- (xxxv) Willard Bay.

(b) The Division may establish special restrictions for Division-managed properties, such as on-leash requirements and temporary or locational closures for dogs, and post them at specific Division properties and at Regional offices;

(c) Organized events or group gatherings of twenty-five (25) or more individuals that involve the use of dogs, such as dog training or trials, that occur on Division properties may require a special use permit as described in R657-28; and

(d) Dog training may be allowed in designated areas on Lee Kay Center and Willard Bay WMA by the Division without a special use permit.

R657-54-14. Closed Areas.

A person may not hunt wild turkey in any area posted closed by the Division or any of the following areas:

- (1) Salt Lake Airport boundaries as posted.
- (2) Incorporated municipalities: Many incorporated municipalities prohibit the discharge of firearms and other weapons. Check with the respective city officials for specific boundaries and limitations.
- (3) All State Waterfowl Management Areas except Browns Park and Stewart Lake
- (4) All National Wildlife Refuges unless declared open by the managing authority.
- (5) Military installations, including Camp Williams, are closed to hunting and trespassing.

R657-54-15. Possession of Live Protected Wildlife.

It is unlawful for any person to hold in captivity at any time any protected wildlife, except as provided by Title 23, Wildlife Resources Code or any rules and regulations of the Wildlife Board. Protected wildlife that is wounded must be immediately killed and shall be included in the hunter's bag limit.

R657-54-16. Spotighting.

- (1) Except as provided in Section 23-13-17:
 - (a) a person may not use or cast the rays of any spotlight, headlight or other artificial light to locate protected wildlife while having in possession a firearm or other weapon or device that could be used to take or injure protected wildlife; and
 - (b) the use of a spotlight or other artificial light in a field, woodland or forest where protected wildlife are generally found is prima facie evidence of attempting to locate protected wildlife.
- (2) The provisions of this section do not apply to:
 - (a) the use of the headlights of a motor vehicle or other artificial light in a usual manner where there is no attempt or intent to locate protected wildlife; or
 - (b) a person licensed to carry a concealed weapon in accordance with Title 53, Chapter 5, Part 7 of the Utah Code, provided the person is not utilizing the concealed firearm to hunt or take wildlife.

R657-54-17. Exporting Wild Turkey from Utah.

A person may export wild turkey or their parts from Utah only if:

- (1) the person who harvested the turkey accompanies it and possess a valid permit corresponding to the tag; or
- (2) the person exporting the turkey or its parts, if it is not the person who harvested the turkey, has obtained a shipping permit from the Division.

R657-54-18. Waste of Game.

- (1) A person may not waste or permit to be wasted or spoiled any protected wildlife or their parts.
- (2) A person shall not kill or cripple any wild turkey without making a reasonable effort to retrieve the turkey.

R657-54-19. Wild Turkey Poaching Reported Reward Permits.

(1) Any person who provides information leading to another person's arrest and successful prosecution for wanton destruction of a wild turkey under Section 23-20-4, within any limited entry area may receive a permit from the Division to hunt wild turkey in the following year on the same limited entry area where the violation occurred, except as provided in Subsection (2).

(2)(a) In the event that issuance of a Poaching-Reported Reward Permit would exceed 5 percent of the total number of limited entry permits issued in the following year for the respective area, a permit shall not be issued for that respective area. As an alternative, the Division may issue a permit as outlined in Subsection (b).

(b) A permit for a wild turkey, on an alternative limited entry area that has been allocated more than 20 permits, may be issued.

(3)(a) The Division may issue only one Poaching-Reported Reward Permit for any one wild turkey illegally taken.

(b) No more than one Poaching-Reported Reward Permit shall be issued to any one person per successful prosecution.

(c) No more than one Poaching-Reported Reward Permit shall be issued to any one person in any one calendar year.

(d) A person must possess a Utah hunting or combination license to receive a Poaching-Reported Reward Permit.

(4)(a) Poaching-Reported Reward permits may only be issued to the person who provides the most pertinent information leading to a successful prosecution. Permits are not transferrable.

(b) If information is received from more than one person, the director of the Division shall make a determination based on the facts of the case, as to which person provided the most pertinent information leading to the successful prosecution in the case.

(c) The person providing the most pertinent information shall qualify for the Poaching-Reported Reward Permit.

(5) Any person who receives a Poaching-Reported Reward Permit must be eligible to hunt and obtain wild turkey permits as provided in all rules and regulations of the Wildlife Board and the Wildlife Resources Code.

(6) For purposes of this section, "successful prosecution" means the screening, filing of charges and subsequent adjudication for the poaching incident.

R657-54-20. Season Dates, Bag and Possession Limits, and Areas Open.

Season dates, bag and possession limits, areas open, and number of permits for taking wild turkey are provided in the guidebook of the Wildlife Board for taking upland game and wild turkey.

KEY: wildlife, wild turkey, game laws

August 7, 2017

Notice of Continuation August 18, 2014

23-14-18

23-14-19

R708. Public Safety, Driver License.**R708-47. Emergency Contact Database.****R708-47-1. Authority.**

This rule is authorized by Subsection 53-3-205.6(4).

R708-47-2. Purpose.

The purpose of this rule is to establish procedures whereby a licensee may designate an emergency contact person that may be notified if the licensee is involved in a motor vehicle accident or other emergency situation when the licensee is unable to communicate with the person.

R708-47-3. Definitions.

(1) Definitions used in this rule are found in Section 53-3-102.

(2) In addition:

(a) EMER means an Emergency Contact Database form;

(b) "emergency contact database" means the database maintained by the division which contains all of the information provided by a licensee regarding the licensee's emergency contact person;

(c) "emergency contact information" means the contact information for a licensee's emergency contact person including the emergency contact person's:

(i) name;

(ii) address;

(iii) relationship to the licensee; and

(iv) up to three (3) telephone numbers;

(d) "emergency contact person" means anyone designated by a licensee to be notified if the licensee is involved in a motor vehicle accident or other emergency situation when the licensee is unable to communicate with the person;

(e) "licensee" means a person who holds a license certificate, learner permit, identification card, or any other type of license or permit issued under Title 53, Chapter 3; and

(f) "Utah Interactive" means the company which contracts with the state to provide and maintain web services for the division.

R708-47-4. Method to Provide or Change Emergency Contact Information.

(1) A licensee may provide or change emergency contact information by:

(a) accessing the web service provided by Utah Interactive;

or

(b) submitting a completed EMER to the division.

KEY: emergency contact database

December 26, 2012

53-3-205.6

Notice of Continuation August 7, 2017

R708. Public Safety, Driver License.**R708-48. Ignition Interlock System Program.****R708-48-1. Authority.**

This rule is authorized by Sections 53-3-1004 and 53-3-1007.

R708-48-2. Purpose.

The purpose of this rule is to set standards governing the administration and enforcement of the Ignition Interlock System Program in accordance with Title 53, Chapter 3, Part 10.

R708-48-3. Definitions.

(1) Terms used in this rule are defined in Section 53-3-1002.

(2) In addition:

(a) "act of moral turpitude" means conduct which:

(i) is done knowingly contrary to justice, honesty or good morals;

(ii) has an element of falsification or fraud; or

(iii) contains an element of harm or injury directed to another person or another property;

(b) "business" means an ignition interlock system business established to install, remove and maintain ignition interlock systems as specified in R708-31 Ignition Interlock Systems and includes both the business' primary location and any branch offices;

(c) "department" means the Department of Public Safety created in Section 53-1-103;

(d) "division" means the Driver License Division created in Section 53-3-103;

(e) "install" means any service provided by an ignition interlock installer including the installation or removal of an ignition interlock system and the performance of any type of maintenance or service on an ignition interlock system; and

(f) "felony" means a crime under the laws of this state, any other state, the United States, or any district, possession, or territory of the United States for which the penalty is a term of imprisonment in excess of one year.

R708-48-4. Requirements for Licensure of Providers.

(1) A provider shall:

(a) be responsible for the oversight of all installers employed by the business;

(b) maintaining all records of the business, including client records and personnel files for all installers employed by the business;

(c) insure the security of all client records and personal data on any forms, receipts or contracts used by the business;

(d) allow the division to conduct inspections and audits of the business and its records;

(e) furnish any records of the business to the division upon request;

(f) train any installers who will be working at the business on how to properly install an ignition interlock system and provide the installers with a certificate of completion;

(g) complete and require all installers who will be working at the business to complete any training administered by the division;

(h) not be convicted of or have been found by the division to have engaged in conduct which constitutes a felony or crime of moral turpitude;

(i) not knowingly employ an installer who has been convicted of or who has been found by the division to have engaged in conduct which constitutes a felony or crime of moral turpitude;

(j) post signs on the business to identify the business by the name listed on the provider's license application;

(k) conspicuously display at the business a copy of the provider's license and business license;

(l) not be employed by more than one business at a time;

(m) insure that the business does not operate from the same facility or location as another business;

(n) notify the division when the provider is no longer working at a business;

(o) surrender the provider's license to the division within five days if the provider is no longer working at the business or the provider's license is denied, cancelled or revoked;

(p) obtain and maintain a \$50,000 surety bond for the business that shall:

(i) protect against liability to third persons;

(ii) be continuous in form and run concurrently with the license period; and

(iii) provide for notice to the division in the event of cancellation of the surety bond.

(q) ensure that a business, located in a municipality having a population of 50,000 or more, is not located within 1500 feet of a facility in which vehicle registrations or driver licenses are issued to the public, unless the business was established in that location prior to the establishment of the facility in which vehicle registrations or driver licenses are issued to the public;

(r) not solicit business directly or indirectly or display or distribute any advertising material within 1500 feet of a building in which vehicle registrations or driver licenses are issued to the public;

(s) seek approval from the division before moving the business;

(t) insure that the business' facilities and buildings comply with federal, state, and local building, fire, safety and health codes;

(u) not use any logos, letterhead, documents, driver license or vehicle plate license recreations of the department, the division or the Utah State Tax Commission, Division of Motor Vehicles, in their advertising, however a business may display on its premises a sign reading, "This Ignition Interlock System Provider is licensed by the State of Utah."

(v) notify the division in writing of any changes to residential or mailing address of anyone who works at the business; and

(w) notify the division in writing if any employee is no longer employed by the business.

R708-48-5. Procedure to Obtain and Renew a Provider License.

(1) To apply for or renew a provider license, an applicant shall submit a completed provider application packet to the division at 4501 South 2700 West, Salt Lake City, Utah.

(2) The packet shall include:

(a) a completed provider application form provided by the division, which has been signed and notarized by the applicant and all other required parties;

(b) an application or renewal fee, along with any branch office fees, which shall be made payable to the department;

(c) one completed FBI applicant fingerprint card (Form FD-258) with the applicant's legible fingerprints and a check or money order made payable to the Utah Bureau of Criminal Identification to cover the fee associated with a criminal history background check;

(d) samples of all forms, receipts, and contracts used in the course of operation of the business;

(e) a schedule of fees to be charged by the business for each service performed by the business;

(f) a description of how the business shall be operated, which shall include:

(i) a description of how the provider will meet the requirements of Title 53, Chapter 3, Part 10 and R708-48;

(ii) a detailed installer training plan; and

(iii) copies of all training materials that will be used;

(g) evidence of a \$50,000 surety bond for the business that

shall:

- (i) protect against liability to third persons;
 - (ii) be continuous in form and run concurrently with the license period; and
 - (iii) provide for notice to the division in the event of cancellation of the surety bond.
- (h) a copy of the business license for the business as required by the municipality or county in which the business is located; and
- (i) evidence of two years prior experience in operating a business.

(3) When seeking to renew a provider license, the provider shall:

- (a) submit all of the items listed in R708-48-5(2)(a) through (c);
- (b) submit an updated copy of the items listed in R708-48-5(2)(d) through (f) if the business has made any changes to these items since the provider applied for or renewed the provider license; and
- (c) not be required to submit the items listed in R708-48-5(2)(g) through (i).

(4) Upon receipt of a completed provider application packet, the division shall review all of the materials submitted by the applicant to determine if the applicant meets the requirements in Title 53, Chapter 3, Part 10 and R708-48.

(5) If the division determines that the application packet contains all of the necessary information, the division shall conduct a site inspection of the business before a license may be granted.

(6)(a) If the business passes the division's inspection and meets all of the requirements for licensure found in Title 53, Chapter 3, Part 10 and R708-48, the applicant shall be granted a provider license.

(b) A provider license is not transferable.

(c) If a provider license is lost or destroyed, the provider may obtain a duplicate of the license by submitting the following to the division:

- (i) a notarized affidavit which describes the date the license was lost or destroyed and the surrounding circumstances; and
- (ii) a duplicate license fee.

(7) If the applicant does not meet the requirements for licensure found in Title 53, Chapter 3, Part 10 and R708-48, the application shall be denied and the applicant shall be issued a notice of denial with information regarding the reason for denial and process by which the applicant may appeal the division's decision.

R708-48-6. Requirements for an Installer.

(1) A licensed installer shall:

- (a) possess a valid installer license when working as an installer;
- (b) only be allowed to work under the supervision of the specific provider listed on the installer's license application;
- (c) complete training for ignition interlock systems offered by the provider of the business for which they will be employed;
- (d) complete any training administered by the division; and
- (e) not be convicted of or have been found by the division to have engaged in conduct which constitutes a felony or a crime of moral turpitude;

R708-48-7. Procedure to Obtain and Renew an Installer License.

(1) To apply for or renew an installer license, an applicant shall submit a completed installer application packet to the division at 4501 South 2700 West, Salt Lake City, Utah.

(2) The packet shall include:

- (a) a completed installer application form provided by the division, which has been signed and notarized by the applicant

and all other required parties;

(b) an application or renewal fee, which shall be made payable to the department;

(c) one completed FBI applicant fingerprint card (Form FD-258) with the applicant's legible fingerprints and a check or money order made payable to the Utah Bureau of Criminal Identification to cover the fee associated with a criminal history background check; and

(d) a signed agreement verifying that the applicant has read and understands all of the laws and rules that are applicable to the ignition interlock system program.

(3) Upon receipt of a completed installer application packet, the division shall review all of the materials submitted by the applicant to determine if the applicant meets the requirements in Title 53, Chapter 3, Part 10 and R708-48.

(4)(a) If the applicant meets all of the requirements for licensure found in Title 53, Chapter 3, Part 10 and R708-48, the applicant shall be granted an installer license.

(b) Installer licenses are not transferable.

(c) If an installer license is lost or destroyed, the provider may obtain a duplicate of the license by submitting the following to the division:

(i) a notarized affidavit which describes the date the license was lost or destroyed and the surrounding circumstances; and

(ii) the duplicate license fee.

(5) If the applicant does not meet the requirements for licensure found in Title 53, Chapter 3, Part 10 and R708-48, the application shall be denied and the applicant shall be issued a notice of denial with information regarding the reason for denial and process by which the applicant may appeal the division's decision.

R708-48-8. Business Inspection and Audit Procedures.

(1) The division shall conduct inspections and audits of a business and its records to verify compliance with Title 53, Chapter 3, Part 10 and R708-48.

(2)(a) The premises and records of the business shall be available to the division immediately upon request for the purpose of an inspection or audit.

(b) If it becomes necessary to remove records from the business for audit purposes, the division shall provide a receipt to the business which will include:

- (i) the name and location of the provider;
- (ii) the location of the business;
- (iii) the date that records are removed;
- (iv) a description of what records are removed;
- (v) the signature of an authorized representative of the business; and
- (vi) the signature of a division representative.

(c) Upon return of the records, the receipt shall be updated with:

- (i) the date the records were returned;
- (ii) the signature of an authorized representative of the business who is receiving the records; and
- (iii) the signature of the division representative returning the records.

(d) The division shall hold the records for the minimum amount of time necessary so an audit may occur without creating an unnecessary hardship or inconvenience to the business.

(3)(a) A division representative shall prepare a written report of all inspections and audits.

(b) A copy of these reports shall be maintained by the division for ten years.

(c) Following a business inspection or audit, the division shall notify the business of the division's findings by sending a:

- (i) letter to the business indicating any problems, concerns or violations found during the inspection or audit along with an

action plan detailing expectations regarding correction of the items identified; or

(ii) notice of agency action.

R708-48-9. Contracts.

(1)(a) A written contract approved by the division shall be executed by both the client and an authorized representative of the business before the business may render any services to a client.

(b) If a client is under 18 years of age, the contract shall also be signed by a parent or legal guardian prior to any service.

(c) A copy of the contract shall be given to the client and the original retained by the business.

(d) The contract shall contain:

(i) the client's:

(A) full legal name;

(B) date of birth;

(C) driver license number;

(D) license plate number;

(E) full residential address; and

(F) full mailing address;

(ii) a description of the services to be provided by the business;

(iii) a break-down of the costs associated with all services provided; and

(iv) any requests made by the client.

(2) The client shall be given a receipt upon payment of any fees.

R708-48-10. Records.

(1) All of the business' records shall be kept accurately and completely.

(2) The business shall maintain the following client records for a period of four years after the contractual obligation with the client has concluded:

(a) documentation of any service provided to a client which include:

(i) the client's:

(A) name;

(B) date of birth;

(C) driver license number;

(ii) license plate number;

(iii) type of service provided;

(iv) exact date the service was performed;

(v) name of the installer and installer ID number; and

(vi) ignition interlock device serial number and name of manufacturer;

(b) original copies of client contracts;

(c) original copies of receipts; and

(3) The business' administrative records shall be maintained for the life of the business, including:

(a) business plans;

(b) licenses;

(c) training records;

(d) personnel records; and

(e) surety bond information.

(4) Records of the business shall be updated within 24 hours of service.

(5) All ignition interlock system installations and removals must be reported electronically to the division in a manner specified by the division within 24 hours, and shall include the following:

(a) the client's:

(i) name;

(ii) date of birth

(iii) driver license number;

(b) license plate number;

(c) ignition interlock device serial number and name of manufacturer; and

(d) date of installation or removal.

(6) Each provider shall review the records of the business at least annually for completeness and accuracy.

(7) If any records that the business is required to maintain are lost or destroyed, the provider shall be immediately file an affidavit with the division which states:

(a) the date the record was lost or destroyed; and

(b) the circumstances surrounding the loss or destruction.

R708-48-11. Grounds for the Denial, Cancellation or Revocation of a Provider or Installer License.

(1) A provider or installer may be denied, cancelled or revoked for any of the following:

(a) failure to comply with any of the provisions of Title 53, Chapter 3, Part 10, 41-6a-518, or R708-48; or

(b) falsification of any records or other required information relating to the Ignition Interlock System program.

(2)(a) In determining whether denial, cancellation or revocation is appropriate, the division shall consider the provider's or installer's involvement and the severity of the violation.

(b) In lieu of cancelling or revoking a license, the division may elect to place the provider or installer on probation if warranted by the nature of the violation.

R708-48-12. Adjudicative Proceedings.

(1) All adjudicative proceedings set forth in this section shall be conducted informally as provided in Section 63G-4-202.

(2) The division shall initiate agency action against an provider or installer with a notice of agency action in accordance with Section 63G-4-201.

(3)(a) An ignition interlock system provider or ignition interlock system installer who receives a notice of agency action indicating that the division intends to deny, cancel or revoke a license may request a hearing by filing a written request for hearing with the division within 10 calendar days from the date the notice of agency action is issued.

(b) If a timely request for hearing is filed, the agency action shall be stayed until the division's hearing officer issues a written decision.

(c) A hearing shall be held before the division's hearing officer within 30 calendar days from the day that the division receives the written request for hearing, unless agreed to by the parties.

(d) At the hearing, the provider or installer shall have an opportunity to demonstrate why the division should not take agency action.

(e) The hearing officer shall issue a written decision within 10 business days after the hearing in accordance with Section 63G-4-203.

(f) The written decision of the hearing officer shall constitute final agency action and is subject to judicial review in accordance with Section 63G-4-402.

**KEY: Ignition Interlock System Program
November 19, 2012 Title 53, Chapter 3, Part 10
Notice of Continuation August 7, 2017**

R850. School and Institutional Trust Lands, Administration.**R850-100. Trust Land Management Planning.****R850-100-100. Authorities.**

This rule implements Sections 6, 8, 10, and 12 of the Utah Enabling Act, Articles X and XX of the Utah Constitution, and Subsections 53C-1-302(1)(a)(ii) and 53C-2-201(3) which require that planning procedures be developed for trust lands, and for the opportunity for interested parties to participate in the planning process.

R850-100-150. Scope.

Nothing in this rule is intended to supersede or replace the provisions of R850-21-150, R850-22-150, R850-23-150, R850-24-125, R850-30-150, R850-40-150, R850-41-150, R850-50-150, R850-70-150, R850-80-150, R850-90-150, R850-120-150, or R850-140-350.

R850-100-175. Definitions.

The general definitions provided in R850-1-200 apply to this section. In addition, the words and terms used in Section R850-100-500 shall have the following-described meanings, unless otherwise indicated:

1. Public Lands: Lands and resources administered by the federal Bureau of Land Management or USDA Forest Service.
2. Interested Parties:
 - (a) The beneficiaries of the lands involved in any planning effort;
 - (b) local government officials.
3. Land Management, Tenure Adjustment, and Access Plans: A plan to evaluate and direct the management, disposal, and acquisition of lands in a specific area, and to provide for the establishment, maintenance, or both, of access to retained or acquired lands.
4. Local Government Officials: Elected county or municipal officials with jurisdiction over areas included in a planning effort.

R850-100-200. Simultaneous Use of Trust Land Assets.

The agency shall encourage the simultaneous use of compatible, revenue generating activities on trust lands.

R850-100-300. Joint Planning.

The agency may participate in joint planning with other land management agencies when the director determines that the commitment of agency resources is justified, and trust management obligations will be facilitated.

R850-100-400. Assessments of Natural and Cultural Resources.

1. The Resource Development Coordinating Committee (RDCC) process provides a natural resource assessment for purposes of trust land management. No other natural resource analysis is required beyond consultation with the RDCC. The public may comment on proposed trust land plans and uses through the RDCC process.

2. Cultural resource analysis on specific actions shall be conducted pursuant to R850-60.

R850-100-500. Land Management, Tenure, and Access Plans.

1. The agency may develop land management, tenure adjustment, and access plans for selected geographical regions of the state.

2. The planning criteria, regions, and boundaries shall be established by the director.

3. Plans developed under this section may:
- (a) Designate areas where particular uses will be permitted or denied;
 - (b) identify trust lands designated for disposal to the

federal government or other entities;

(c) identify public lands desired for acquisition;

(d) identify other lands and assets for acquisition that are not located on public lands; and

(e) identify access routes across public lands necessary for the economic development of trust lands within the planning boundaries.

4. Before adopting a plan developed under this section, the agency shall submit the plan for approval by the board of trustees.

(a) Prior to presenting a plan to the board for approval, the agency shall solicit input from interested parties; and,

(b) submit the plan for review by the RDCC.

KEY: management, natural resource assessment, land use
December 22, 2010 **53C-1-302(1)(a)(ii)**
Notice of Continuation August 15, 2017 **53C-2-201(3)**

R856. Science Technology and Research Governing Authority (Utah), Administration.

R856-1. USTAR Technology Acceleration Program Grants.

R856-1-1. Authority.

(1) Subsection 63M-2-503(2) requires the USTAR governing authority to make rules describing the purpose, eligibility criteria, award process, and reporting requirements for each grant program administered by USTAR.

R856-1-2. Purpose and Goals.

(1) The Technology Acceleration Program (TAP) provides funding and other support to Utah companies to accelerate the research and development of new technologies that have a strong market potential.

(2) The goals of TAP are to:

(a) enhance Utah's innovation system by supporting the development, retention, and attraction of science and technology companies; and,

(b) accelerate the growth of high-potential technology companies, leading to the creation of high-paying science and technology jobs in Utah.

(3) Proposals will be reviewed on a competitive basis. All projects funded through TAP must have an identified market and/or commercialization path.

(4) Anticipated duration of projects will be 12-18 months. Funding must be budgeted by State fiscal year (July 1 - June 30) and funding will be dependent on meeting milestones and continued USTAR appropriation.

R856-1-3. Definitions.

(1) "Applicant" means a company applying for a USTAR TAP Grant.

(2) "Awardee" means a company that has been awarded a TAP Grant.

(3) "Company" or "Companies" means a privately owned corporation, limited liability company, partnership, or other business entity or association and:

(a) does not include an individual, sole proprietorship, or higher-education institution; and,

(b) is represented by persons at least 18 years old.

(4) "Governing Authority" means the Utah Science, Technology and Research Governing Authority.

(5) "TAP" means the USTAR Technology Acceleration Program, its activities and services.

(6) "TAP grant" means the competitive grants awarded as part of the USTAR Technology Acceleration Program.

(7) "Targeted Industry Sector" means the Utah industry or industries designated as such by USTAR for purposes of eligibility for TAP grant funding as described in Subsection R856-1-4(1) below.

(8) "Technology" includes applications of scientific research such as inventions, methods, processes, or other material, virtual application, or intellectual property.

(9) "Technology gap" means the disparity between a company's existing technology or technological capacity and what is needed to develop a commercial application for a product.

(10) "Technology Readiness Level" or "TRL" level means the characterization of the maturity of the technology used by the federal government (<http://ustar.org/our-programs/tap-technology-acceleration-program/tap-technology-readiness-levels/>).

(11) "USTAR" means the Utah Science, Technology and Research Initiative.

R856-1-4. Eligibility Criteria at Time of Application.

(1) Company must be developing a technology in a targeted industry sector.

(a) USTAR will identify the industry sector(s) eligible to

receive a TAP grant in the TAP application materials.

(b) The USTAR governing authority will, according to its discretion and judgment, review and approve the targeted technology sectors to ensure they are strategically selected to align with USTAR's economic development objectives and maximize the potential benefit to the state

(i) In selecting industry sectors eligible to receive support from TAP, the governing authority may consider the following factors:

(A) statewide or regional importance of the industry to Utah's economy;

(B) relative size of the sector, its stability, and growth potential;

(C) characteristics of the state's existing workforce, including education and training;

(D) the current availability of other sources of funding or risk capital (public or private) for companies in the technology sector;

(E) the potential for the industry sector to develop new jobs and business opportunities in the state; and,

(2) The company must be developing a technology assessed to be between a TRL of 3-5.

R856-1-5. Eligibility Criteria at Time of Award and for Maintenance of Grant.

(1) Company must meet the following size, revenue, and funding criteria:

(a) have fewer than 50 employees;

(b) have less than one-million dollars in annual revenue; and

(c) not raised more than five-million dollars in private funding, excluding non-dilutive funding.

(2) Company must be Utah-based.

(a) To be considered Utah-based, a company must:

(i) be registered with the Utah Division of Corporations as an active, for-profit business entity, in good standing;

(ii) have a valid business license from the governing locality at the company's primary location;

(iii) have a substantial presence in the state of Utah;

(A) "substantial presence" means that at least 90% of company's employees are employed in the State of Utah;

(B) company must be approved by the USTAR governing authority according to R856-1-5(2) with consideration given at time of award.

(iv) maintain employees in Utah, which will require the company to provide a copy of its most recent reporting for unemployment insurance with the Utah Department of Workforce Services;

(v) maintain its principal place of business in Utah; and,

(vi) not relocate the company or substantial portions of its employees, operations, or management outside of the State of Utah.

(b) If a company does not meet the criteria in Subsection R856-1-5(1), or if it cannot be reasonably determined whether the company meets the criteria, the governing authority, in its discretion and upon approval by a majority vote, may determine whether a company should be considered a Utah-based company for purposes of the TAP grant by weighing the following factors:

(i) relative size of the entity including the number of employees in Utah and the relative size of operations in the state;

(ii) whether the company is registered as a for-profit business entity in Utah and has a business license in the appropriate Utah city or county;

(iii) whether the company's principal place of business is Utah;

(iv) likelihood that the company will maintain a substantial presence in the state of Utah;

(v) whether the technology will be developed in Utah and how much will be based in Utah when it is completed; and,
 (vi) degree to which the company's activities and operations positively impact Utah's economy.

R856-1-6. Application and Submission Guidelines.

(1) For each new round of grants, USTAR will provide a program announcement and make applications and instructions available on USTAR's website, and in paper form upon request.

(2) The instructions will include the following:

(a) The procedure for submitting an application.

(b) Specific instructions for application content which will include:

(i) description of the company's technology and commercialization plan and objectives;

(ii) list of technical milestones;

(iii) description of potential market for product;

(iv) potential economic impact on Utah's economy; and,

(v) timeline for completion.

(c) Specific instructions for the required budget outline, including:

(i) total project cost;

(ii) a description of funds already secured for activities related to this project;

(iii) an itemized budget detailing planned use of grant funds; and,

(iv) a breakdown of costs to complete each milestone.

(d) Description of the application evaluation process and scoring system.

(e) Instructions for reporting project results and completing annual follow-up surveys.

(3) Completed applications must be received on or before the specified deadline in the application instructions.

(4) All complete applications will be reviewed and awardees selected via the criteria and method outlined in Sections R856-1-7 and R856-1-8 herein.

R856-1-7. Application Review Procedure.

(1) Initial eligibility screening.

(a) USTAR will conduct an initial eligibility screening for each application to ensure:

(i) completeness;

(ii) strict conformity with application instructions;

(iii) verification of minimum eligibility requirements; and

(iv) appropriateness of applicant's reported TRL assessment, technical merit, proposed timelines, and budget.

(b) Any application that fails to meet the criteria in R856-1-7(1) will be rejected and not considered for review.

(2) Panel review.

(a) Accepted applications will be reviewed by independent subject-matter experts ("expert panel") who will evaluate and score the applicant's proposed research project using the criteria in R856-1-8.

(i) Each expert panel will consist of at least two technical subject-matter-experts and one business or industry expert.

(ii) Each expert will review the proposals using an established scoring rubric provided by USTAR that includes evaluation on technical merit, commercialization strategy, economic impact to the state and budget and any other factors considered relevant by USTAR.

(iii) USTAR will have discretion to select the independent experts for the expert review panels and shall consider, as applicable:

(A) academic qualifications, including, for a technical subject-matter expert, whether the expert has a terminal degree in a relevant field;

(B) relevant work experience and practical training in the field;

(C) knowledge of the target industry sector in Utah;

(D) experience evaluating grant proposals;

(E) general investment experience; and,

(F) any other factors USTAR deems important.

(iv) USTAR will screen the experts for conflicts of interest before reviews are initiated, using the conflict of interest policy on USTAR's website. Experts are participating in the application review as a volunteer for USTAR. Each expert is obligated under contract to maintain the classification of records and to keep information protected and confidential as described in the Utah Government Records Access and Management Act (GRAMA).

(3) Governing authority review.

(a) A subcommittee of the governing authority will convene to review the expert panel's scores and develop recommendations for TAP grants.

(b) The subcommittee will recommend projects for award and award amounts of grant funding to the full governing authority for final approval.

R856-1-8. Evaluation and Award Criteria.

(1) The panel of subject matter experts will use an established scoring system to evaluate and rank grant applications and determine grant amounts.

(a) The scoring criteria will be made available during the application period.

(b) The scoring system will be designed to assess and compare each applicant across several categories, which may include:

(i) technical merit of proposal;

(ii) strength and experience of company and management team;

(iii) appropriate technology readiness level (TRL 3-5);

(iv) potential economic impact, as measured by:

(A) job creation;

(B) product sales;

(C) potential revenue due to expansion of current business or development of a new businesses; and, or,

(D) projected time to revenue or job creation;

(v) market need,

(vi) technical and management experience and qualifications;

(vii) commercialization strategy

(viii) reasonableness of the proposed budget, including whether the amounts are appropriate for the work proposed;

(ix) reasonableness of proposed milestones;

(x) proposed timeline is achievable and will not exceed 18 months; and

(xi) any other factor indicative of applicant's ability to produce measurable and timely impacts on the state in areas related to the economic development performance metrics used to evaluate USTAR's activities.

R856-1-9. Grant Amount, Award, and Required Contract.

(1) USTAR will have the discretion to limit the amount of funding that may be awarded for each TAP based on available funds, scope of project, and quality of proposal.

(2) USTAR reserves the right to award funding for any proposal in full or in part, to request additional information, or to reject any or all applications based on the eligibility and evaluation criteria set forth in these rules and according to the judgment and discretion of the governing authority.

(3) Upon award of the TAP grant, and prior to any disbursement of funds, Company must enter into a contract with USTAR governing the use of grant funding.

(4) Unless addressed in the terms and conditions of the contract between company and USTAR, the following provisions shall apply:

(a) company must remain a Utah-based company for at least five years from initial disbursement of TAP funding;

(b) grant funding may not be used to provide a primary benefit to any state or country other than Utah; and,

(c) for all other eligibility requirements, company must maintain eligibility status for the TAP program until the project is complete, all milestones have been met, final disbursement of funding has been made, and first year reporting has been completed.

(5) Violations of Subsection R856-1-9(4) may result in forfeiture of grant funding and may require repayment of all or a portion of the funding received as part of the TAP grant.

readiness level (TRL)
August 15, 2017

63M-2-302(h)

R856-1-10. Contract Modifications.

(1) Company may request a modification to the terms of a TAP contract.

(2) USTAR may deny a modification request for any reason.

(3) USTAR shall have discretion to agree to reasonable, nonsubstantive changes.

(a) Nonsubstantive changes may include the following:

(i) changes to milestone due dates, if the changes do not change the total length of the project;

(ii) corrections to clerical errors in the application materials;

(iii) technical changes to conditions that do not alter the budget, company's eligibility status, or violate any state or federal law.

(b) USTAR staff can issue a "stop work" order until the project can be reviewed by the USTAR governing authority in a closed meeting to determine whether to end a contract due to failed milestones.

(4) Substantive changes must be approved by the USTAR governing authority.

(5) All approved changes shall be made in writing and through an amendment modifying the terms of the grant agreement when required by State procurement regulations.

R856-1-11. Milestones.

(1) TAP funding must be used to accelerate the research and development of a technology from TRL level 3 to 5 to a higher TRL level, and project proposals must identify specific milestones leading to the proposed outcome.

(2) Examples of acceptable milestones must be specific to the project may include:

(a) research and development activities;

(b) proof of concept;

(c) product validation; and,

(d) product development.

(3) Remaining grant funds will be disbursed upon successful completion of designated milestones.

(4) Specific funding details will be provided in the program announcement and in each TAP grant contract.

R856-1-12. Funding Distribution.

(1) Expenses for each milestone will be reimbursed upon successful completion of that milestone, as outlined in the contract.

(2) Specific funding details will be provided in the program announcement and in each TAP grant contract.

(3) Failure to successfully complete the milestones may result in a recapture of all or part of the grant funding and will be grounds to terminate the contract and any future funding.

R856-1-13. Reporting.

(1) Companies are required to provide reporting as specified in Section 63M-2-703 for at least five (5) years following initial receipt of grant funds.

KEY: Utah Science Technology and Research (USTAR), Technology Acceleration Program (TAP) grants, technology

R856. Science Technology and Research Governing Authority (Utah), Administration.**R856-2. USTAR University-Industry Partnership Program Grants.****R856-2-1. Authority.**

Subsection 63M-2-503(2) requires the USTAR governing authority to make rules describing the purpose, eligibility criteria, award process, and reporting requirements for each grant program administered by USTAR.

R856-2-2. Purpose and Goals.

USTAR's Industry Partnership Program promotes the development of industry-university partnerships for technology-based economic development. This program will accelerate the commercialization of technology and innovation by teaming industry and university research expertise to address specific technology problems or gaps identified by a company with a substantial presence in Utah. The technology development will lead to a new product or a market advantage for the company.

R856-2-3. Definitions.

(1) "Applicant" means a company and a university researcher applying for a particular collaborative project.

(2) "Awardee(s)" means a project that has been awarded an Industry Partnership Program Grant.

(3) "Governing Authority" means the Utah Science, Technology and Research Governing Authority.

(4) "Company" or "Companies" means a privately-owned corporation, limited liability company, partnership, or other business entity or association and:

(a) does not include an individual, sole proprietorship, or higher-education institution; and,

(b) is represented by persons at least 18 years old.

(5) "Commercialization plan" means the strategy or process by which a company will introduce a technology into the market.

(6) "IPP" means the USTAR Industry Partnership Program, its activities and services.

(7) "IPP Grant" means the competitive grants awarded and administered as part of the USTAR Industry Partnership Program.

(8) "Targeted Industry Sector" means the Utah industry or industries designated as such by USTAR for purposes of eligibility for IPP grants using the selection criteria described in these rules.

(9) "Technology" includes applications of scientific research such as inventions, methods, processes, or other material, virtual application, or intellectual property.

(10) "Technology gap" means the disparity between a company's existing technology or technological capacity and what is needed to develop a commercial application for a product.

(11) "Technology Readiness Level" or "TRL" level means the characterization of the maturity of the technology used by the federal government (<http://ustar.org/our-programs/tap-technology-acceleration-program/tap-technology-readiness-levels/>).

(12) "University" means any public or not-for-profit institution of higher education located in Utah.

(13) "USTAR" means the Utah Science, Technology and Research Initiative.

R856-2-4. Eligibility Criteria.

(1) Company must be developing a technology in a targeted industry sector.

(a) USTAR will identify the industry sector(s) eligible to receive a TAP grant in the TAP application materials.

(b) The USTAR governing authority will, according to its discretion and judgment, review and approve the targeted

technology sectors to ensure they are strategically selected to align with USTAR's economic development objectives and maximize the potential benefit to the state

(i) In selecting industry sectors eligible to receive support from TAP, the governing authority may consider the following factors:

(A) statewide or regional importance of the industry to Utah's economy;

(B) relative size of the sector, its stability, and growth potential;

(C) characteristics of the state's existing workforce, including education and training;

(D) the current availability of other sources of funding or risk capital (public or private) for companies in the technology sector;

(E) the potential for the industry sector to develop new jobs and business opportunities in the state; and,

(2) Proposal must be jointly developed by a company with a substantial presence in Utah as defined in R856-2-4(4), and a university.

(3) Proposal must be submitted by an authorized body within the university, (Eg. Office of Sponsored Programs).

(4) An authorized representative from the company must certify that:

(a) company lacks technical capacity to resolve stated technology gap;

(b) the proposed university technology will resolve the technology gap; and,

(c) company commits to provide a cost-share contribution in the form of a defined amount of funding paid to the university and/or in-kind contributions as defined in Sections R856-2-4 and R856-2-5.

(5) Company must have a substantial presence in Utah.

(a) A substantial presence, for purposes of the IPP grant, requires the following:

(i) be registered with the Utah Division of Corporations as an active, for-profit business entity, in good standing;

(ii) have a valid business license from the governing locality at the company's primary location;

(iii) meet the following criteria for employees in the state of Utah:

(A) if the company has 8 full time equivalent employees or less, at least 50% must be employed in Utah;

(B) if the company has 9-36 full time equivalent employees, at least 4 employees or 25%, whichever is greater, must be employed in Utah;

(C) if the company has over 36 full time equivalents, at least 10 people must be employed in Utah; or

(D) as approved by USTAR governing authority.

(iv) maintain its principal place of business in Utah; and,

(v) not relocate the company or substantial portions of its employees, operations, or management outside of the State of Utah.

(b) Additionally, USTAR shall, according to its judgment and discretion, determine whether a company has a substantial presence for purposes of the IPP grant by weighing the following factors:

(i) size of workforce in Utah;

(ii) percentage of company's total workforce in Utah;

(iii) amount of matching funds;

(iv) business taxes paid to the State of Utah;

(v) relative size of the entity including the number of employees in Utah and the relative size of operations in the state;

(vi) whether the company is registered as a domestic, for-profit business entity in Utah and has a business license in the appropriate Utah city or county;

(vii) whether the company's principal place of business is in Utah;

(viii) likelihood that the company will maintain a substantial presence in the state of Utah; and,

(ix) the degree to which the company's activities and operations positively impact Utah's economy.

(6) Cost-sharing required:

(a) Company must pledge a matching contribution to support the project;

(b) Company matching funds may be provided via:

(i) Direct payment to university for the research project; and/or

(ii) "In-kind" contribution, which may include:

(A) Company Subject Matter Expert(s) (SME) time on the project;

(B) Materials and equipment;

(C) Work/research space;

(D) Travel and other company expenses budgeted for the project; or,

(E) Other contributions, as approved by USTAR.

(c) A one-to-one match is not required. USTAR retains discretion to approve the ratio of the match. In determining the ratio of the match, USTAR considerations may include:

(i) size of company;

(ii) budgetary requirements to complete the project; and,

(iii) potential economic impact to state.

(b) University will provide USTAR with documentation of funding received from company to fulfill the company cost-share commitment prior to completion of the project.

(c) All reported cost- share is subject to audit by USTAR.

R856-2-5. Application and Submission Guidelines.

(1) USTAR will accept applications for IPP grants on an ongoing basis.

(2) USTAR will provide the following instructions for applicants:

(a) The procedure for submitting an application.

(b) Specific instructions for application content, which will include:

(i) description of the company's technology and commercialization plan and objectives;

(ii) list of technical milestones;

(iii) description of potential market for product;

(iv) potential economic impact on Utah's economy; and,

(v) timeline for completion.

(c) Instructions for providing an outlined budget for total project cost, including:

(i) total project cost;

(ii) a description of funds secured or dedicated to the project;

(iii) an itemized budget detailing planned use of grant funds; and,

(iv) a breakdown of costs to complete each milestone.

(d) Description of the application evaluation process and scoring system.

(e) Instructions for reporting project results and completing annual follow-up surveys.

(3) The IPP grant application and instructions will be available on USTAR's website and in paper form upon request.

(4) All completed applications will be reviewed and awardees selected via the criteria and method outlined herein.

R856-2-6. Application Review Procedure.

(1) Pre-screening.

(a) Companies are encouraged to work with USTAR headquarters or a USTAR regional director to define the technology gap and identify appropriate researchers at universities.

(b) Universities may perform an initial analysis and assessment of the project to be submitted with the application.

(2) Initial eligibility screening.

(a) USTAR will conduct an initial eligibility screening for each application to ensure:

(i) completeness;

(ii) strict conformity with application instructions;

(iii) verification of minimum eligibility requirements;

(iv) appropriateness of applicant's reported TRL assessment, technical merit, proposed timelines, and budget.

(b) Any application that fails to meet the criteria in Subsection R856-2-6(2) will be rejected and not considered for review.

(3) Panel Review.

(a) Accepted applications will be reviewed independent subject-matter experts ("expert panel") who will evaluate and score the applicant's proposed research project using the criteria in Section R856-2-7.

(i) Each expert will review the proposals using an established scoring rubric provided by USTAR that includes evaluation on technical merit, commercialization strategy, economic impact to the state and budget and any other factors considered relevant by USTAR.

(ii) USTAR will have discretion to select the independent experts for the expert review panels and shall consider, as applicable:

(A) academic qualifications, including, for a technical subject-matter expert, whether the expert has a terminal degree in a relevant field;

(B) relevant work experience and practical training in the field;

(C) knowledge of the target industry sector in Utah;

(D) experience evaluating grant proposals; and,

(E) any other factors USTAR deems important.

(iii) USTAR will screen the experts for conflicts of interest before reviews are initiated, using the conflict of interest policy on USTAR's website. Experts are participating in the application review as a volunteer for USTAR. Each expert is obligated under contract to maintain the classification of records and to keep information protected and confidential as described in the Utah Government Records Access and Management Act (GRAMA).

(4) Governing authority review.

(a) A subcommittee of the governing authority will convene to review the expert panel's scores and develop recommendations for IPP grants.

(b) The subcommittee will recommend projects for award and award amounts of grant funding to the full governing authority for final approval.

R856-2-7. Evaluation and Award Criteria.

(1) The panel of subject matter experts will use an established scoring system to evaluate and rank grant applications (if there is more than 1) and recommend grant amounts:

(a) The scoring criteria will be made available during the application period;

(b) The scoring system will be designed to assess and compare each proposal across several categories, which may include:

(i) technical merit of proposal;

(ii) strength and experience of company and management team;

(iii) appropriate technology readiness level (TRL 2-5);

(iv) potential for economic impact, as measured by potential for:

(A) job creation

(B) product sales;

(C) potential revenue due to expansion of current business or development of new businesses; and/or

(D) projected time to revenue or job creation.

(v) market need;

- (vi) technical capabilities and experience of the team;
- (vii) commercialization strategy;
- (viii) reasonableness of the proposed budget and commitment of matching funds, including whether the amounts are appropriate for the work proposed;
- (ix) reasonableness of proposed milestones;
- (x) proposed timeline is achievable and will not exceed 18 months; and
- (xi) any other factor indicative of applicant's ability to produce measurable and timely impacts on the state in areas related to the economic development performance metrics used to evaluate USTAR's activities.

R856-2-8. Grant Amount, Award, and Required Contract.

- (1) USTAR will have the discretion to limit the amount of funding that may be awarded for each IPP grant based on available funds, scope of project, and quality of proposal.
- (2) USTAR reserves the right to award funding for any proposal in full or in part, to request additional information, or to reject any or all applications based on the eligibility and evaluation criteria set forth in these rules and according to the judgment and discretion of the governing authority.
- (3) Upon award of an IPP grant, and prior to any disbursement of funds, university and company must enter into contract(s) with USTAR governing the use of grant funding and requirements for participation in the IPP.
- (4) Unless addressed in the terms and conditions of the contract between university and USTAR, the following provisions shall apply:
 - (a) company must maintain a substantial presence in the state for at least five years subsequent to initial disbursement of grant funds;
 - (b) IPP grant funding may not be used to provide a primary benefit to any state or country other than Utah; and,
 - (c) for all other eligibility requirements, company must maintain eligibility status for the IPP program until the project is complete, all milestones have been met, final disbursement of funding has been made, and first year reporting has been completed.
- (5) Violations of Subsection R856-2-8(4) may result in forfeiture of grant funding and may require repayment of all or a portion of the funding received as part of the IPP program.

R856-2-9. Contract Modifications.

- (1) University and Company may request a modification to the terms of an IPP contract.
- (2) USTAR may deny a modification request for any reason.
- (3) USTAR shall have discretion to agree to reasonable, non-substantive changes.
 - (a) Non-substantive changes may include the following:
 - (i) changes to timelines of less than one month if it is the first such modification;
 - (ii) changes to milestone due dates, if the changes do not change the total length of the project;
 - (iii) corrections to clerical errors in the application materials;
 - (iv) technical changes to conditions that do not alter the budget, company's eligibility status, or violate any state or federal law;
 - (b) USTAR staff can issue a "stop work" order until the project can be reviewed by the USTAR governing authority in a closed meeting to determine whether to end a contract due to failed milestones.
- (4) Substantive changes must be approved by the USTAR governing authority.
- (5) All approved changes shall be made in writing and through an amendment modifying the terms of the grant agreement when required by State procurement regulations.

R856-2-10. Milestones.

- (1) IPP grant funding must be used to accelerate the research and development of a technology from TRL level 2 to 5 to a higher TRL level, and project proposals must identify specific milestones leading to the proposed outcome.
- (2) Examples of acceptable milestones must be specific to the project may include:
 - (a) research and development activities;
 - (b) proof of concept;
 - (c) product validation; and,
 - (d) product development.
- (3) Remaining grant funds will be disbursed upon successful completion of designated milestones.
- (4) Specific funding details will be provided in the program announcement and in each IPP grant contract.

R856-2-11. Funding Distribution.

- (1) Expenses for each milestone will be reimbursed upon successful completion of that milestone, as outlined in the contract.
- (2) Specific funding details will be provided in the program announcement and in each IPP grant contract.
- (3) Failure to successfully complete the milestones may result in a recapture of all or part of the grant funding will be grounds to terminate the contract and any future funding.

R856-2-12. Reporting.

- (1) Companies are required to provide the reporting, as applicable, specified in Section 63M-2-703 for at least five (5) years following initial receipt of grant funds.
- (2) University is required to provide the reporting, as applicable, specified in Sections 63M-2-702 and 63M-2-704.

KEY: Utah Science Technology and Research (USTAR), Industry Partnership Program (IPP), technology readiness level (TRL)

August 15, 2017

63M-2-302(h)

R856. Science Technology and Research Governing Authority (Utah), Administration.**R856-3. USTAR University Technology Acceleration Grants.****R856-3-1. Authority.**

Subsection 63M-2-503(2) requires the USTAR governing authority to make rules establishing the eligibility, award process, and reporting criteria for each grant program administered by USTAR.

R856-3-2. Purpose and Goals.

(1) University Technology Acceleration Grants (UTAG) provide funding to individual researchers or research teams employed by a Utah not-for-profit college or university to support research, discovery and innovation that has a strong market potential.

(2) Proposals will be reviewed on a competitive basis. All projects funded through UTAG must have an identified market and/or commercialization path.

(3) Anticipated duration of projects will be 12-18 months. Funding must be budgeted by State fiscal year (July 1 - June 30) and funding will be dependent on meeting milestones and continued USTAR appropriation.

R856-3-3. Definitions.

(1) "Applicant" means an individual researcher or a research team applying for a USTAR UTAG.

(2) "Awardee" means an individual researcher or team that has been awarded a UTAG.

(3) "Governing authority" means the Utah Science, Technology and Research Governing Authority.

(4) "Targeted Industry Sector" means the Utah industry or industries designated as such by USTAR for purposes of eligibility for UTAG grant funding as described in R856-3-4(2).

(5) "Technology" includes applications of scientific research such as inventions, methods, processes, or other material, virtual application, or intellectual property.

(6) "Technology Readiness Level" or "TRL" level means the characterization of the maturity of the technology used by the federal government (<http://ustar.org/our-programs/tap-technology-acceleration-program/tap-technology-readiness-levels/>).

(7) "University" means any public or not-for-profit institution of higher education located in Utah.

(8) "USTAR" means the Utah Science, Technology and Research Initiative.

(9) "UTAG" means the University Technology Acceleration Grants administered by the Utah Science, Technology and Research Initiative.

R856-3-4. Eligibility Criteria.

(1) Individual researchers or research teams employed by a Utah University are eligible to apply for UTAG.

(2) Individual researchers or research teams must be developing a technology in a targeted industry sector.

(a) USTAR will identify the "Industry Sector(s)" eligible to receive a UTAG in the UTAG application materials.

(b) The USTAR governing authority will, according to its discretion and judgment, review and approve the targeted technology sectors to ensure they are strategically selected to align with USTAR's economic development objectives and maximize the potential benefit to the state.

(c) In selecting industry sectors eligible to receive support from UTAG, the governing authority may consider the following factors:

(i) statewide or regional importance of the industry to Utah's economy;

(ii) relative size of the sector, its stability, and growth potential;

(iii) characteristics of the state's workforce including education and training;

(iv) the current availability of other sources of funding or risk capital (public or private) for early-stage companies in the technology sector;

(v) the potential for the industry sector to develop new jobs and business opportunities in the state;

(vi) whether research in this sector will lead to creation of a company in Utah or IP transfer to an existing Utah company; and,

(vii) any other factor the governing authority deems relevant.

(3) If applicable, applicant must have an identified regulatory pathway.

(4) Applicant must have a realistic and verifiable commercialization path for market entry.

(5) Applicant must be developing a technology assessed to be between a TRL of 3-4.

R856-3-5. Application and Submission Guidelines.

(1) For each new round of grants, USTAR will provide a program announcement and make applications and instructions available on USTAR's website and in paper form upon request.

(2) The instructions will include the following:

(a) The procedure for submitting an application.

(b) Specific instructions for application content which will include:

(i) description of the company's technology and commercialization plan and objectives;

(ii) list of technical milestones;

(iii) description of potential market for the product;

(iv) potential economic impact on Utah's economy; and,

(v) timeline for completion.

(c) Specific instructions for the required budget outline, including:

(i) total project cost;

(ii) a description of funds secured for activities related to the project;

(iii) an itemized budget detailing planned use of grant funds; and,

(iv) a breakdown of costs to complete each milestone.

(d) Description of the application evaluation process and scoring system.

(e) Instructions for reporting project results and completing annual follow-up surveys.

(3) Completed applications must be received on or before the specified deadline in the application instructions from an authorized agent of the university.

(4) All complete applications will be reviewed and awardees selected via the criteria and method outlined in Sections R856-3-6 and R856-3-7 herein.

R856-3-6. Application Review Procedure.

(1) University Pre-screening.

(a) Universities may perform an initial analysis and assessment of the project to be submitted with the application.

(2) Initial eligibility screening.

(a) USTAR will conduct an initial eligibility screening for each application to ensure:

(i) completeness;

(ii) strict conformity with application instructions;

(iii) verification of minimum eligibility requirements; and

(iv) appropriateness of applicant's reported TRL assessment, technical merit, proposed timelines, and budget.

(b) Any application that fails to meet the criteria in Subsection R856-3-6(2) and R856-3-5(1)-(4) will be rejected and not considered for review.

(3) Panel Review.

(a) Accepted applications will be reviewed by a panel of

independent subject-matter experts ("expert panel") who will evaluate and score the applicant's proposed research project using the criteria in Section R856-3-7.

(i) Each expert panel will consist of at least two technical subject-matter experts and one business or industry expert.

(ii) Each expert will review the proposals using an established scoring rubric provided by USTAR that includes evaluation on technical merit, commercialization strategy, economic impact to the state and budget and any other factors considered relevant by USTAR.

(iii) USTAR will have discretion to select the independent experts for the expert review panels and shall consider, as applicable:

(A) academic qualifications, including, for a technical subject-matter expert, whether the expert has a terminal degree in a relevant field;

(B) relevant work experience and practical training in the field;

(C) knowledge of the target industry sector in Utah;

(D) experience evaluating grant proposals; and,

(E) any other factors USTAR deems important.

(iv) USTAR will screen the experts for conflicts of interest before reviews are initiated using the conflict of interest policy available on USTAR's website. Experts are participating in the application review as a volunteer for USTAR. Each expert is obligated under contract to maintain the classification of records and to keep information protected and confidential as described in the Utah Government Records Access and Management Act (GRAMA).

(4) Governing authority review.

(a) A subcommittee of the governing authority will convene to review the expert panel's scores and develop recommendations for UTAG funding.

(b) The subcommittee will recommend projects and amounts of grant funding to the full governing authority for final approval.

R856-3-7. Application Evaluation and Award Criteria.

(1) The panel of subject matter experts will use an established scoring system to evaluate and rank grant applications and recommend grant amounts.

(a) The scoring criteria will be made available during the application period;

(b) The scoring system will be designed to assess and compare each applicant across several categories, which may include:

(i) technical merit of proposal;

(ii) strength and experience of research or management team, as applicable;

(iii) appropriate technology readiness level (TRL 3-4);

(iv) potential economic impact, as measured by:

(A) job creation;

(B) product sales;

(C) potential revenue due to expansion of current business or development of a new business; and, or,

(D) projected time to revenue or job creation;

(v) market need, technical and management experience and qualifications;

(vi) commercialization strategy;

(vii) reasonableness of the proposed budget, including whether the amounts are appropriate for the work proposed;

(viii) reasonableness of proposed milestones;

(ix) proposed timeline is achievable and will not exceed 18 months; and,

(x) any other factor indicative of applicant's ability to produce measurable and timely impacts on the state in areas related to the economic development performance metrics used to evaluate USTAR's activities.

R856-3-8. Grant Amount, Award, and Required Contract.

(1) USTAR will have the discretion to limit the amount of funding that may be awarded for each UTAG based on available funds, scope of project, and quality of proposal.

(2) No overhead, F&A, G&A or any other indirects will be funded by the UTAG program.

(3) USTAR reserves the right to award funding for any proposal in full or in part, to request additional information, or to reject any or all applications based on the eligibility and evaluation criteria set forth in these rules and according to the judgement and discretion of the governing authority.

(4) Upon award of a UTAG, and prior to any disbursement of funds, university must enter into a contract with USTAR governing the use of grant funding.

(5) Unless addressed in the terms and conditions of the contract between university and USTAR, the following provisions shall apply:

(a) grant funding may not be used to provide a primary benefit to any state or country other than Utah; and,

(b) for all other eligibility requirements, awardee must maintain eligibility status for the UTAG program until the project is complete, all milestones have been met, final disbursement of funding has been made, and first year reporting has been completed.

(6) Violations of Subsection R856-3-8(4) may result in forfeiture of grant funding and require repayment of all or a portion of the funding received as part of the program.

R856-3-9. Contract Modifications.

(1) University may request a modification to the terms of an UTAG contract.

(2) USTAR may deny a modification request for any reason.

(3) USTAR shall have discretion to agree to reasonable, nonsubstantive changes.

(a) Nonsubstantive changes may include the following:

(i) changes to timelines of less than one month if it is the first such modification;

(ii) changes to milestone due dates, if the changes do not change the total length of the project;

(iii) corrections to clerical errors in the application materials;

(iv) technical changes to conditions that do not alter the budget, company's eligibility status, or violate any state or federal law;

(b) USTAR staff can issue a "stop work" order until the project can be reviewed by the USTAR governing authority in a closed meeting to determine whether to end a contract due to failed milestones.

(4) Substantive changes must be approved by the USTAR governing authority.

(5) All approved changes shall be made in writing and through an amendment modifying the terms of the grant agreement when required by State procurement regulations.

R856-3-10. Milestones.

(1) UTAG funding must be used to accelerate the research and development of a technology from TRL level 3 to 4 to a higher TRL level, and project proposals must identify specific milestones leading to the proposed outcome.

(2) Examples of acceptable milestones must be specific to the project, and may include:

(a) research and development activities,

(b) proof of concept,

(c) product validation; or,

(d) product development.

(3) Remaining grant funds will be disbursed upon successful completion of designated milestones.

(4) Specific funding details will be provided in the

program announcement and in each UTAG contract.

R856-3-11. Funding Distribution.

(1) Expenses for each milestone will be reimbursed upon successful completion of that milestone, as outlined in the contract.

(2) Specific funding details will be provided in the program announcement and in each UTAG grant contract.

(3) Failure to successfully complete the milestones may result in a recapture of all or part of the grant funding and will be grounds to terminate the contract and any future funding.

R856-3-12. Reporting.

(1) Companies are required to provide reporting as specified in Section 63M-2-703 for at least five (5) years following initial receipt of grant funds; or,

(2) University is required to provide the reporting for researchers or research teams, as applicable, specified in Sections 63M-2-702 and 63M-2-704.

**KEY: Utah Science Technology and Research (USTAR),
University Technology Acceleration Grants (UTAG),
technology readiness level (TRL)
August 15, 2017**

63M-2-302(h)

R856. Science Technology and Research Governing Authority (Utah), Administration.

R856-4. USTAR Science Technology Initiation Grant.

R856-4-1. Authority.

Subsection 63M-2-503(2) requires the USTAR governing authority to make rules describing the purpose, eligibility criteria, award process, and reporting requirements for each grant program administered by USTAR.

R856-4-2. Purpose and Goals.

(1) The Science and Technology Initiation Grant (STIG) program provides grants to support university affiliated researchers in the development of preliminary data, to conduct proof of concept experiments or other precursor research activities required to pursue larger, grants from a federal agency, grant making foundation, industry or related entity.

(2) The goal of STIG is to increase the amount of external research funding received by Utah's universities, promote interdisciplinary and cross-university collaboration and strengthen the research and development capacity, particularly in commercially-oriented areas aligned to existing state industry sectors.

(3) STIG grants are to be administered to the university that employs the applicant.

R856-4-3. Definitions.

(1) "Applicant" means the university affiliated researcher or research team applying for a STIG for a particular project.

(2) "Awardee(s)" means a project that has been awarded a STIG.

(3) "Commercialization plan" means the strategy or process by which a company will introduce a technology into the market.

(4) "Governing Authority" means the Utah Science, Technology and Research Governing Authority.

(5) "Grant making foundation" means any non-profit or not-for-profit organization that awards research grants.

(6) "STIG" and "STIG grant" mean the Science and Technology Initiation Grant, a competitive grant program administered by USTAR.

(7) "Targeted funding" means the larger commercially-oriented grant or other external funding offered by a federal agency, grant making foundation, or related entity for which the researcher will apply after using the STIG grant to develop required data.

(8) "Targeted Industry Sector" means the Utah industry or industries designated as such by USTAR for purposes of eligibility for STIG grants grant funding as described in these rules.

(9) "Technology" includes applications of scientific research such as inventions, methods, processes, or other material, virtual application, or intellectual property.

(10) "Technology Readiness Level" or "TRL" level means the method of characterization of the maturity of the technology used by the federal government (<http://ustar.org/our-programs/tap-technology-acceleration-program/tap-technology-readiness-levels/>).

(11) "University" means any college, university, or other public or not-for-profit higher education institution with its primary location in Utah.

(12) "USTAR" means the Utah Science, Technology and Research Initiative.

R856-4-4. Eligibility Criteria.

(1) Individual researchers or research teams employed by a University are eligible to apply for a STIG grant.

(2) Applicants must identify the specific targeted funding source and the award type or solicitation.

(3) Applicants must propose using grant funds to support

specific research and development activities, such as developing proofs of concept or performing initial data generation, necessary to develop requisite data for applicant's technology to be eligible for the targeted funding.

(4) Collaborations among researchers at different universities and/or among researchers in different disciplines, while not required, will be given priority in the evaluation process described in R856-4-7.

(5) USTAR funding cannot be used as a material benefit to another state or country. Funding from a STIG grant must be used within the State of Utah.

(6) Applicants must be developing a technology in a targeted industry sector.

(a) USTAR will identify the industry sectors eligible to receive a STIG in the STIG application materials.

(b) The USTAR governing authority will, according to its discretion and judgment, review and approve the targeted technology sectors to ensure they are strategically selected to align with USTAR's economic development objectives and maximize the potential benefit to the state.

(c) In selecting industry sectors eligible to receive support from STIG, the governing authority may consider the following factors:

(i) statewide or regional importance of the industry to Utah's economy;

(ii) relative size of the sector, its stability, and growth potential;

(iii) characteristics of the state's existing workforce including education and training;

(iv) the current availability of other sources of funding or risk capital (public or private) for companies in the technology sector;

(v) the potential for the industry sector to develop new jobs and business opportunities in the state;

(vi) likelihood that research in this sector will result in creation of a company in Utah or IP transfer to an existing Utah company; and,

(vii) any other factor the governing authority deems relevant.

(7) Applicant's existing technology must be assessed to be between TRL 1-3.

(8) Applicants must obtain a cost-sharing commitment from each university that will receive funding from a STIG grant;

(a) matching funds may be provided via:

(i) Direct payment to university for the research project; and/or

(ii) "In-kind" contribution, which may include:

(A) salary of university affiliated researcher or personnel;

(B) cost of Subject Matter Expert(s) (SME);

(C) materials and equipment;

(D) work/research space;

(E) travel and other expenses budgeted for the project; or,

(F) other contributions, as approved by USTAR

R856-4-5. Application and Submission Guidelines.

(1) USTAR will accept applications for STIG grants on an ongoing basis.

(2) USTAR will make applications and instructions available on USTAR's website and also in paper form upon request.

(3) The instructions will include the following:

(a) The procedure for submitting an application.

(b) Specific instructions for application content which will include:

(i) description of the company's technology and commercialization plan and objectives;

(ii) list of technical milestones;

(iii) description of potential market for the product;

- (iv) potential economic impact on Utah's economy and
- (v) timeline for completion.
- (c) Specific instructions for the required budget outline, including:
 - (i) total project cost;
 - (ii) a description of funds secured for activities related to the project;
 - (iii) an itemized budget detailing planned use of grant funds; and,
 - (iv) breakdown of costs to complete each milestone.
- (d) Description of the application evaluation process and scoring system.
- (e) Instructions for reporting project results and completing annual follow-up surveys.
- (4) All complete applications will be reviewed and awardees selected via the criteria and method outlined in R856-4-(6)-(7).

R856-4-6. Application Review Procedure.

- (1) University Pre-screening.
 - (a) Universities may perform an initial analysis and assessment of the project to be submitted with the application.
- (2) Initial eligibility screening.
 - (a) USTAR will conduct an initial eligibility screening for each application to ensure:
 - (i) completeness;
 - (ii) strict conformity with application instructions;
 - (iii) verification of minimum eligibility requirements; and
 - (iv) appropriateness of applicant's reported TRL assessment, proposed timelines, and budget.
 - (b) Any application that fails to meet the criteria in R856-4-6(2) will be rejected and not considered for review.
 - (3) Panel Review.
 - (a) Accepted applications will be reviewed by independent subject-matter experts ("expert panel") who will evaluate and score the applicant's proposed research project using the criteria in R856-4-7.
 - (i) Each expert panel will consist of at least two technical subject-matter experts.
 - (ii) Each expert will review the proposals using an established scoring rubric provided by USTAR that includes evaluation on technical merit, commercialization strategy, economic impact to the state and budget and any other factors considered relevant by USTAR.
 - (iii) USTAR will have discretion to select the independent experts for the expert review panels and shall consider, as applicable:
 - (A) academic qualifications including whether the expert has a terminal degree in a relevant field;
 - (B) relevant work experience and practical training in the field;
 - (C) knowledge of the target industry sector in Utah;
 - (D) experience evaluating grant proposals; and,
 - (E) any other factors USTAR deems important.
 - (iv) USTAR will screen the experts for conflicts of interest before reviews are initiated using the conflict of interest policy available on USTAR's website. Experts are participating in the application review as a volunteer for USTAR. Each expert is obligated under contract to maintain the classification of records and to keep information protected and confidential as described in the Utah Government Records Access and Management Act (GRAMA).
 - (4) Governing Authority review.
 - (a) A subcommittee of the governing authority will convene to review the expert panel's scores and develop recommendations for STIG grants.
 - (b) The subcommittee will recommend projects for award and award amounts of grant funding to the full governing authority for final approval.

R856-4-7. Evaluation and Award Criteria.

- (1) The panel of subject matter experts will use an established scoring system to evaluate and rank grant applications and recommend grant amounts.
 - (a) The scoring criteria will be made available during the application period;
 - (b) The scoring system will be designed to assess and compare each applicant across several categories, which may include:
 - (i) technical merit of proposal;
 - (ii) strength and experience of the team;
 - (iii) appropriate technology readiness level (TRL 1-3);
 - (iv) whether proposal involves a collaboration between researchers at more than one university;
 - (v) whether the proposal involves a collaboration between researchers in more than one discipline;
 - (vi) competitiveness of the proposed project and team for the target grant;
 - (vii) potential economic impact, as measured by:
 - (A) job creation;
 - (B) product sales;
 - (C) potential revenue due to expansion of current business or development of a new business; and, or,
 - (D) projected time to revenue or job creation;
 - (viii) reasonableness of the proposed budget, including whether the amounts are appropriate for the work proposed;
 - (ix) reasonableness of proposed milestones and timelines; and
 - (x) any other factor indicative of applicant's ability to produce measurable and timely impacts on the state in areas related to the economic development performance metrics used to evaluate USTAR's activities.

R856-4-8. Grant Amount, Award, and Required Contract.

- (1) USTAR will have the discretion to limit the amount of funding that may be awarded for each STIG based on available funds, scope of project, and quality of proposal.
- (2) USTAR reserves the right to award funding for any proposal in full or in part, to request additional information, or to reject any or all applications based on the eligibility and evaluation criteria set forth in these rules and according to the judgment and discretion of USTAR and the governing authority.
- (3) Upon award of a STIG, and prior to any disbursement of funds, university(ies) must enter into a contract with USTAR governing the use of STIG grant funding.
- (4) Unless addressed in the terms and conditions of the contract between university(ies) and USTAR, the following provisions shall apply:
 - (a) grant funding may not be used to provide a primary benefit to any state or country other than Utah; and,
 - (b) for all other eligibility requirements, awardees must maintain eligibility status for the STIG program until the project is complete, all milestones have been met, final disbursement of funding has been made, and first year of reporting has been completed.
- (5) Violations of Subsection R856-4-8(4) may result in forfeiture of grant funding and may require repayment of all or a portion of the funding received as part of the program.

R856-4-9. Contract Modifications.

- (1) University may request a modification to the terms of an STIG contract.
- (2) USTAR may deny a modification request for any reason.
- (3) USTAR shall have discretion to agree to reasonable, nonsubstantive changes.
 - (a) Nonsubstantive changes may include the following:
 - (i) changes to timelines of less than one month if it is the first such modification;

(ii) changes to milestone due dates, if the changes do not change the total length of the project;

(iii) corrections to clerical errors in the application materials;

(iv) technical changes that do not alter the budget, company's eligibility status, or violate any state or federal law;

(b) USTAR staff can issue a "stop work" order until the project can be reviewed by the USTAR governing authority in a closed meeting to determine whether to end a contract due to failed milestones.

(4) Substantive changes must be approved by the USTAR governing authority.

(5) All approved changes shall be made in writing and through an amendment modifying the terms of the grant agreement when required by State procurement regulations.

R856-4-10. Milestones.

(1) STIG funding must be used by individual researchers or research teams to develop proof of concept and/or initial data generation projects needed to apply for the targeted funding. Project proposals must identify specific milestones leading to the proposed outcome.

(2) Examples of acceptable milestones must be specific to the project and designed to result in achieving the targeted funding, may include:

(a) research and development activities;

(b) proof of concept;

(c) product validation; and,

(d) product development.

(3) Remaining grant funds will be disbursed upon successful completion of designated milestones.

(4) Specific funding details will be provided in the program announcement and in each STIG contract.

R856-4-11. Funding Distribution.

(1) Expenses for each milestone will be reimbursed upon successful completion of that milestone, as outlined in the contract.

(2) Specific funding details will be provided in the program announcement and in each STIG grant contract.

(3) Failure to successfully complete the milestones may result in a recapture of all or part of the grant funding and will be grounds to terminate the contract and any future funding.

R856-4-12. Reporting.

(1) All universities receiving STIG funding are required to provide the reporting for researchers or research teams as specified in Section 63M-2-702 and 704, as applicable.

**KEY: USTAR, TRL, STIG
August 15, 2017**

63M-2-302(h)

R856. Science Technology and Research Governing Authority (Utah), Administration.**R856-5. Utah Science, Technology, and Research (USTAR) Energy Research Triangle Professors (ERT-P) Grant.****R856-5-1. Authority.**

Subsection 63M-2-503(2) requires the Utah Science, Technology and Research (USTAR) governing authority to make rules describing the purpose, eligibility criteria, award process, and reporting requirements for each grant program administered by USTAR.

R856-5-2. Purpose and Goals.

(1) The USTAR Energy Research Triangle (ERT) Professors (ERT-P) grant program is a collaborative effort between USTAR and The Utah Governor's Office of Energy Development (OED) and will be administered according to these rules.

(2) Grants provide funding to university faculty research professors for student-led projects in which research teams from at least 3 universities seek to address technical hurdles related to energy and/or natural resource challenges important to economic growth in the state of Utah.

(3) Anticipated duration of projects will be 12 months. Funding must be budgeted by State fiscal year (July 1 - June 30) and funding will be dependent on meeting milestones and continued USTAR/OED appropriation.

R856-5-3. Definitions.

(1) "Applicant" means the research team for a particular project.

(2) "Awardee(s)" means a project that has been awarded an Energy Research Triangle - Professor grant.

(3) "Commercialization plan" means the strategy or process by which a researcher or research team will introduce a technology into the market.

(4) "ERT-P" and "ERT-P grant" mean the Energy Research Triangle - Professor grant program, a competitive grant program administered by USTAR.

(5) "ERT-S" and "ERT-Scholars" means the Energy Research Triangle - Scholars grant program, a competitive grant program administered by USTAR.

(6) "Governing authority" and "GA" means the Utah Science, Technology and Research Governing Authority.

(7) "Lead university" is defined as the university which applies for ERT-P funding and is the principal contact between USTAR and the research team.

(8) "OED" means the Utah Governor's Office of Energy Development.

(9) "Research faculty" means a full time employee of a Utah university.

(10) "Research team" means at least three research faculty representing at least three universities.

(11) "Technology" includes applications of scientific research such as inventions, methods, processes, or other material applications, virtual or digital applications, or intellectual property.

(12) "Technology Readiness Level" or "TRL" level means the characterization of the maturity of the technology used by the federal government (<http://ustar.org/our-programs/tap-technology-acceleration-program/tap-technology-readiness-levels/>).

(13) "University" means any college, university, or other public or not-for-profit higher education institution with its primary location in Utah.

(14) "USTAR" means the Utah Science, Technology and Research Initiative.

(15) "UTAG" means the University Technology Acceleration Grants administered by USTAR.

R856-5-4. Eligibility Criteria.

(1) The ERT-P grant is available to university research teams that meet the following guidelines:

(a) Research team must include at least three researchers.

(b) Research team must include at least three Utah universities.

(c) Research team must include at least two Utah research universities under the Carnegie Classification of Institutions of Higher Education (http://carnegieclassifications.iu.edu/classification_descriptors/basic.php). The following three Utah universities are currently classified as research universities (as of 5/1/2017):

(i) Brigham Young University;

(ii) University of Utah;

(iii) Utah State University;

(2) Research team must be developing a technology with applications that can address technical challenges related to energy and/or natural resource challenges important to economic development in the state of Utah.

(a) USTAR/OED may specify a specific subsector of Utah's energy and natural resource industry as a priority for grant funding in the ERT-P application materials.

(b) ERT-P grants are targeted at energy and natural resource innovation and development.

(c) In selecting targeted energy and natural resource subsectors eligible to receive support from ERT-P, the governing authority may consider the following factors:

(i) statewide or regional importance of the subsector to Utah's economy;

(ii) relative size of the subsector, its stability, and growth potential;

(iii) characteristics of the state's existing workforce, including education and training;

(iv) the current availability of other sources of funding or risk capital (public or private) for early-stage companies in the technology sector;

(v) the potential for the subsector to develop new jobs and business opportunities in the state; and,

(vi) the likelihood that research in this subsector will result in the creation of a company in Utah or IP transfer to an existing Utah company.

(3) Eligible technologies will be between a TRL of 2-5 at the time of the application.

(4) Applicants may not receive ERT-P, ERT-S and/or UTAG funding for the same technology in the same Utah fiscal year.

(5) ERT-P funds cannot support development of a technology beyond a TRL of 6.

R856-5-5. Application and Submission Guidelines.

(1) For each round of grants, USTAR/OED will provide a program announcement and make applications and instructions available on USTAR and/or OED's website, and in paper form upon request.

(2) Completed applications must be received on or before the specified deadline in the application instructions.

(3) The instructions will include the following:

(a) The procedure for submitting an application.

(b) Specific instructions for application content which will include:

(i) technical overview of the project;

(A) description of the technology and commercialization plan and objectives;

(B) list of technical milestones;

(C) Description of potential market for product;

(D) Potential economic impact on Utah's economy; and

(E) timeline for completion.

(ii) Specific instructions for the required budget outline, including:

- (A) total project cost;
 - (B) a description of funds secured for activities related to this project;
 - (C) an itemized budget detailing planned use of grant funds; and,
 - (D) breakdown of costs to complete each milestone.
- (iii) Description of the application evaluation process and scoring system.
 - (iv) Instructions for reporting project results and completing annual follow-up surveys.
- (4) All complete applications will be reviewed and awardees selected via the criteria and method outlined in R856-5-6 and R856-5-7.

R856-5-6. Application Review Procedure.

- (1) Initial eligibility screening.
 - (a) USTAR/OED will conduct an initial eligibility screening for each application to ensure:
 - (i) completeness;
 - (ii) strict conformity with application instructions
 - (iii) verification of minimum eligibility requirements; and
 - (iv) appropriateness of applicant's reported TRL assessment, technical merit, proposed timelines, and budget.
 - (b) Any application that fails to meet the criteria in R856-5-6(1) will be rejected and not considered for review.
- (2) Panel Review.
 - (a) Accepted applications will be reviewed by independent subject-matter experts ("expert panel") who will evaluate and score the applicant's proposed research project using the criteria in R856-5-7.
 - (i) Each expert panel will consist of at least two technical subject-matter-experts and one business or industry expert.
 - (ii) Each expert will review the proposals using an established scoring rubric provided by USTAR that includes evaluation on technical merit, commercialization strategy, economic impact to the state and budget and any other factors considered relevant by USTAR.
 - (iii) USTAR/OED will have discretion to select the independent experts for the expert review panels and shall consider, as applicable:
 - (A) academic qualifications including, for a technical subject-matter expert, whether the expert has a terminal degree in a relevant field;
 - (B) relevant work experience and practical training in the field;
 - (C) knowledge of the commercial/industrial energy or natural resources sector or sub-sector in Utah;
 - (D) experience evaluating grant proposals;
 - (E) general investment experience; and,
 - (F) any other factors USTAR/OED deems important.
 - (iv) USTAR/OED will screen the experts for conflicts of interest before reviews are initiated using the conflict of interest policy available on USTAR's website. Experts are participating in the application review as a volunteer for USTAR. Each expert is obligated under contract to maintain the classification of records and to keep information protected and confidential as described in the Utah Government Records Access and Management Act (GRAMA).
 - (3) Governing authority review.
 - (a) A subcommittee of the governing authority will convene to review the expert panel's scores and develop recommendations.
 - (b) The subcommittee will recommend projects for award and award amounts of a grant funding to the full governing authority for final approval.
 - (c) The Governor or his designee must approve the projects.

R856-5-7. Evaluation and Award Criteria.

- (1) The panel of subject matter experts will use an established scoring system to evaluate and rank grant applications and recommend grant amounts.
 - (a) The scoring criteria will be made available during the application period;
 - (b) The scoring system will be designed to assess and compare each applicant across several categories, which may include:
 - (i) technical merit of proposal;
 - (ii) strength and experience of research and management team;
 - (iii) appropriate technology readiness level
 - (iv) potential economic impact, as measured by:
 - (A) job creation;
 - (B) potential for the development of original intellectual property;
 - (C) potential for technology transfer to industry or establishment of a start-up company.
 - (D) projected time to revenue or job creation;
 - (E) other measures of economic impact such as natural resource, environmental or Utah-specific impacts.
 - (v) market need;
 - (vi) technical and management experience and qualifications;
 - (vii) reasonableness of the proposed budget, including whether the amounts are appropriate for the work proposed;
 - (viii) reasonableness of proposed milestones;
 - (ix) proposed timeline is achievable and will not exceed 12 months; and,
 - (x) any other factor indicative of applicant's ability to produce measurable and timely impacts on the state in areas related to the economic development performance metrics used to evaluate USTAR's activities.

R856-5-8. Grant Amount, Award, and Required Contract.

- (1) USTAR/OED will have the discretion to limit the amount of funding that may be awarded for each ERT-P based on available funds, scope of project, and quality of proposal.
- (2) USTAR/OED reserves the right to award funding for any proposal in full or in part, to request additional information, or to reject any or all applications based on the eligibility and evaluation criteria set forth in these rules and according to the judgment and discretion of the governing authority.
- (3) Upon award of an ERT-P, and prior to any disbursement of funds, each lead university must enter into a contract with USTAR governing the use of grant funding.
 - (a) The "lead university" is defined as the principal investigator's university
 - (b) Subcontracts to the remaining universities will be administered by the lead university.
- (4) Unless addressed in the terms and conditions of the contract between university and USTAR, the following provisions shall apply:
 - (a) grant funding may not be used to provide a primary benefit to any state or country other than Utah; and,
 - (b) for all other eligibility requirements, awardee must maintain eligibility status for the ERT-P program until the project is complete, all milestones have been met, final disbursement of funding has been made, and first year reporting has been completed.
- (5) Violations of R856-5-8(4) may result in forfeiture of grant funding and may require repayment of all or a portion of the funding received as part of the program.
- (6) University overhead, F and A or G and A are not allowed on ERT-P awards.

R856-5-9. Contract Modifications.

- (1) University may request a modification to the terms of an ERT-P contract.

(2) USTAR may deny a modification request for any reason.

(3) USTAR shall have discretion to agree to reasonable, nonsubstantive changes.

(a) Nonsubstantive changes may include the following:

(i) changes to milestone due dates, if the changes do not change the total length of the project;

(ii) corrections to clerical errors in the application materials;

(iii) technical changes to conditions that do not alter the budget, applicant's eligibility status, or violate any state or federal law;

(b) USTAR staff can issue a "stop work" order until the project can be reviewed by the USTAR governing authority in a closed meeting to determine whether to end a contract due to failed milestones.

(4) Substantive changes must be approved by the USTAR governing authority.

(5) All approved changes shall be made in writing and through an amendment modifying the terms of the grant agreement when required by State procurement regulations.

R856-5-10. Milestones.

(1) Award funding must be used to accelerate the research and development of a technology from one TRL level to a higher TRL level, and project proposals must identify specific milestones leading to the proposed outcome.

(2) Examples of acceptable milestones must be specific to the student researcher to engage in project may include:

(a) research under and development activities;

(b) proof of concept;

(c) product validation; and,

(d) product development.

(3) Remaining grant funds will be disbursed upon successful completion of designated milestones.

(4) Specific funding details will be provided in the program announcement and in each grant contract.

R856-5-11. Funding Distribution.

(1) Award funding shall be made to the lead university and will be distributed per the subcontracts to each of the supporting universities.

(2) Expenses for each milestone will be reimbursed upon successful completion of that milestone, as outlined in the contract.

(3) Specific funding details will be provided in the program announcement and in each ERT-P grant contract.

(4) Failure to successfully complete the milestones will be grounds to terminate the contract and any future funding.

R856-5-12. Milestones and Reporting.

(1) Research team is required to provide reporting, as applicable, specified in Sections 63M-2-702 and 704 for at least (5) years following initial receipt of the grant funds.

**KEY: ERT Professors Grant, TRL, USTAR
August 15, 2017 63M-2-302(h)**

R856. Science Technology and Research Governing Authority (Utah), Administration.**R856-6. Utah Science, Technology and Research (USTAR) Energy Research Triangle Scholars (ERT-S) Grant.****R856-6-1. Authority.**

Subsection 63M-2-503(2) requires the Utah Science, Technology and Research (USTAR) governing authority to make rules describing the purpose, eligibility criteria, award process, and reporting requirements for each grant program administered by USTAR.

R856-6-2. Purpose and Goals.

(1) The USTAR Energy Research Triangle (ERT) Scholars (ERT-S) grant program is a collaborative effort between USTAR and the Utah Governor's Office of Energy Development (OED) and will be administered according to these rules.

(2) Grants provide funding to university faculty research professors for student-led projects that seek to address technical hurdles related to energy and/or natural resource challenges important to economic growth in the state of Utah.

(3) Anticipated duration of projects will be 12 months. Funding must be budgeted by State fiscal year (July 1 - June 30) and funding will be dependent on meeting milestones and continued USTAR/OED appropriation.

R856-6-3. Definitions.

(1) "Applicant" means the university faculty research professor and student for a particular project.

(2) "Awardee" means a project that has been awarded an Energy Research Triangle - Scholars grant.

(3) "Commercialization plan" means the strategy or process by which a researcher will introduce a technology into the market.

(4) "ERT-S" and "ERT-S grant" mean the Energy Research Triangle - Scholar grant program, a competitive grant program administered by USTAR.

(5) "Governing authority" and "GA" means the Utah Science, Technology and Research Governing Authority.

(6) "OED" means the Utah Governor's Office of Energy Development.

(7) "Technology" includes applications of scientific research such as inventions, methods, processes, or other material, virtual or digital application, or intellectual property.

(8) "Technology Readiness Level" or "TRL" level means the characterization of the maturity of the technology used by the federal government (<http://ustar.org/our-programs/tap-technology-acceleration-program/tap-technology-readiness-levels/>).

(9) "University" means any college, university, or other public or not-for-profit higher education institution with its primary location in Utah.

(10) "USTAR" means the Utah Science, Technology and Research Initiative.

(11) "ERT-P" and "ERT-P grant" mean the Energy Research Triangle - Professor grant program, a competitive grant program administered by USTAR.

(12) "UTAG" means the University Technology Acceleration Grants administered by USTAR.

R856-6-4. Eligibility Criteria.

(1) The ERT-S grant is restricted to university researchers for student-led projects meeting the following guidelines:

(a) Project must be led by currently matriculated student in good standing.

(b) Project must be led by student enrolled in a university.

(c) Student project must be overseen by a research professor at a university.

(2) Student researcher must be developing a technology with applications that can address technical hurdles related to

energy and/or natural resource challenges important to economic growth in the state of Utah.

(a) USTAR/OED may specify a specific subsector of Utah's energy and natural resource industry as a priority for grant funding in the ERT-S application materials.

(b) In selecting targeted energy and natural resource subsectors eligible to receive support from ERT-S, the governing authority may consider any or all of the following factors:

(i) statewide or regional importance of the subsector to Utah's economy;

(ii) relative size of the subsector, its stability, and growth potential;

(iii) characteristics of the state's existing workforce, including education and training;

(iv) the current availability of other sources of funding or risk capital (public or private) for early-stage companies in the technology sector;

(v) the potential for the subsector to develop new jobs and business opportunities in the state; and,

(vi) the likelihood that research in this subsector will result in the creation of a company in Utah or IP transfer to an existing Utah company.

(3) Eligible technologies will be between a TRL of 2 and 5 at the time of application.

(4) Applicants may not receive ERT-S, ERT-P and/or UTAG funding for the same technology in the same Utah fiscal year.

(5) ERT-S funds cannot support development of a technology beyond a TRL of 6.

R856-6-5. Application and Submission Guidelines.

(1) For each round of grants, USTAR/OED will provide a program announcement and make applications and instructions available on USTAR and/or OED's website and in paper form upon request.

(2) The instructions will include the following:

(a) The procedure for submitting an application.

(b) Specific instructions for application content, which will include:

(i) description of the company's technology and commercialization plan and objectives;

(ii) list of technical milestones;

(iii) description of potential market for product;

(iv) potential economic impact on Utah's economy; and,

(v) timeline for completion.

(c) Specific instructions for the required budget outline, including:

(i) total project cost;

(ii) a description of funds secured for activities related to the project;

(iii) an itemized budget detailing planned use of grant funds; and,

(iv) a breakdown of costs to complete each milestone.

(d) Description of the application evaluation process and scoring system.

(e) Instructions for reporting project results and completing annual follow-up surveys.

(3) Completed applications must be received on or before the specified deadline in the application instructions.

(4) All complete applications will be reviewed and awardees selected via the criteria and method outlined in Sections R856-6-6 and R856-6-7 herein.

R856-6-6. Application Review Procedure.

(1) Initial eligibility screening.

(a) USTAR/OED will conduct an initial eligibility screening for each application to ensure:

(i) completeness;

(ii) strict conformity with application instructions;
 (iii) verification of minimum eligibility requirements; and
 (iv) appropriateness of applicant's reported TRL assessment, technical merit, proposed timelines, and budget.

(b) Any application that fails to meet the criteria in R856-6-6(1) will be rejected and not considered for review.

(2) Panel Review.

(a) Accepted applications will be reviewed by independent subject-matter experts ("expert panel") who will evaluate and score the applicant's proposed research project using the criteria in R856-6-7.

(i) Each expert panel will consist of at least two technical subject-matter-experts and one business or industry expert.

(ii) Each expert will review the proposals using an established scoring rubric provided by USTAR that includes evaluation on technical merit, commercialization strategy, economic impact to the state and budget and any other factors considered relevant by USTAR.

(iii) USTAR/OED will have discretion to select the independent experts for the expert review panels and shall consider, as applicable:

(A) academic qualifications including, for a technical subject-matter expert, whether the expert has a terminal degree in a relevant field;

(B) relevant work experience and practical training in the field;

(C) knowledge of the commercial/industrial energy or natural resources sector or sub-sector in Utah;

(D) experience evaluating grant proposals;

(E) general investment experience; and,

(F) any other factors USTAR/OED deems important.

(iv) USTAR/OED will screen the experts for conflicts of interest before reviews are initiated using the conflict of interest policy available on USTAR's website. Experts are participating in the application review as a volunteer for USTAR. Each expert is obligated under contract to maintain the classification of records and to keep information protected and confidential as described in the Utah Government Records Access and Management Act (GRAMA).

(3) Selection Committee.

(a) USTAR and OED may hold a selection committee to discuss the outcomes of the panel review.

(4) Governing authority review.

(a) A subcommittee of the governing authority will convene to review the expert panel's scores and develop recommendations for grants.

(b) The subcommittee will recommend projects for award and award amounts of grant funding to the full governing authority for final approval.

(c) The Governor or his designee must approve the projects.

R856-6-7. Evaluation and Award Criteria.

(1) The panel of subject matter experts will use an established scoring system to evaluate and rank grant applications and recommend grant amounts.

(a) The scoring criteria will be made available during the application period;

(b) The scoring system will be designed to assess and compare each applicant across several categories, which may include:

(i) technical merit of proposal;

(ii) strength and experience of company and management team;

(iii) appropriate technology readiness level

(iv) abilities and potential of the student to complete the research and/or pursue a career related to energy or natural resources;

(v) potential economic impact, as measured by:

(A) potential for the development of original intellectual property;

(B) potential for technology transfer to industry or establishment of a start-up company;

(C) projected time to revenue or job creation;

(D) other measures of economic impact such as natural resource, environmental or Utah- specific impacts.

(E) Any other factor indicative of applicant's ability to produce measurable and timely impacts on the state in areas related to the economic development performance metrics used to evaluate USTAR's activities

(vi) market need,

(vii) technical and management experience and qualifications of faculty advisor;

(viii) commercialization strategy

(ix) reasonableness of the proposed budget, including whether the amounts are appropriate for the work proposed;

(x) reasonableness of proposed milestones;

(xi) proposed timeline is achievable and will not exceed 18 months; and

(xii) any other factor indicative of applicant's ability to produce measurable and timely impacts on the state in areas related to the economic development performance metrics used to evaluate USTAR's activities.

R856-6-8. Grant Amount, Award, and Required Contract.

(1) USTAR/OED will have the discretion to limit the amount of funding that may be awarded for each ERT-S based on available funds, scope of project, and quality of proposal.

(2) USTAR/OED reserves the right to award funding for any proposal in full or in part, to request additional information, or to reject any or all applications based on the eligibility and evaluation criteria set forth in these rules and according to the judgment and discretion of the governing authority.

(3) Upon award of a ERT-S, and prior to any disbursement of funds, each university must enter into a contract with USTAR governing the use of grant funding.

(4) Unless addressed in the terms and conditions of the contract between university and USTAR, the following provisions shall apply:

(a) grant funding may not be used to provide a primary benefit to any state or country other than Utah; and,

(b) for all other eligibility requirements, awardee must maintain eligibility status for the ERT-S program until the project is complete, all milestones have been met, final disbursement of funding has been made, and first year reporting has been completed.

(5) Violations of R856-6-8(4) may result in forfeiture of ERT-S grant funding and may require repayment of all or a portion of the funding received as part of the program.

(6) University overhead, F&A or G&A are not allowed on ERT-S awards.

R856-6-9. Contract Modifications.

University may request a modification to the terms of an ERT-S contract.

(1) USTAR may deny a modification request for any reason.

(2) USTAR shall have discretion to agree to reasonable, nonsubstantive changes.

(a) Nonsubstantive changes may include the following:

(i) changes to milestone due dates, if the changes do not change the total length of the project;

(ii) corrections to clerical errors in the application materials;

(iii) technical changes to conditions that do not alter the budget, applicant's eligibility status, or violate any state or federal law;

(b) USTAR staff can issue a "stop work" order until the

project can be reviewed by the USTAR governing authority in a closed meeting to determine whether to end a contract due to failed milestones.

(3) Substantive changes must be approved by the USTAR governing authority.

(4) All approved changes shall be made in writing and through an amendment modifying the terms of the grant agreement when required by State procurement regulations.

R856-6-10. Milestones.

(1) Award funding must be used to accelerate the research and development of a technology from one TRL level to a higher TRL level, and project proposals must identify specific milestones leading to the proposed outcome.

(2) Examples of acceptable milestones must be specific to the student researcher to engage in project may include:

- (a) research under and development activities;
- (b) proof of concept;
- (c) product validation; and,
- (d) product development.

(3) Remaining grant funds will be disbursed upon successful completion of designated milestones.

(4) Specific funding details will be provided in the program announcement and in each grant contract.

R856-6-11. Funding Distribution.

(5) Award funding must be made to the university faculty research professor mentoring the student. The professor will then distribute funds to the student researcher to engage in research under the professor's direction.

(6) Expenses for each milestone will be reimbursed upon successful completion of that milestone, as outlined in the contract.

(7) Specific funding details will be provided in the program announcement and in each ERT-S grant contract.

(8) Failure to successfully complete the milestones may result in recapture of all or part of the grant funding and will be grounds to terminate the contract and any future funding.

R856-6-12. Reporting.

(1) Student researcher is required to provide reporting, as applicable, specified in Section 63M-2-702 and 704 for at least (5) years following initial receipt of the grant funds.

**KEY: ERT Scholars Grant, TRL, USTAR
August 15, 2017 63M-2-302(h)**

R856. Science Technology and Research Governing Authority (Utah), Administration.

R856-7. USTAR Definition of High-Quality Job.

R856-7-1. Authority.

Subsection 63M-2-302(1)(c) requires the USTAR governing authority define high-quality jobs.

R856-7-2. Definition.

(1) "High-quality job" means a job that provides compensation of more than 125% of a county average wage as reported by the Department of Workforce Services.

KEY: high-quality jobs, USTAR, high-paying jobs
August 15, 2017 63M-2-302(h)

R926. Transportation, Program Development.**R926-11. Clean Fuel Vehicle Decal Program.****R926-11-1. Purpose and Authority.**

(1) As authorized in Utah Code Sections 41-6a-702 and 72-6-121 this rule establishes procedures for regulating access to high occupancy vehicle lanes by vehicles with a clean fuel vehicle decal regardless of the number of occupants.

(2) United States Code Title 23, Subsection 166(b) authorizes states to allow the use of high occupancy vehicle (HOV) lanes by inherently low emission vehicles (ILEV) and low emission and energy-efficient vehicles with only a single occupant. United States Code Title 23, Subsection 166(d) requires a state to limit or discontinue the use of these single-occupant vehicles if the presence of such vehicles has degraded the operation of the HOV facility.

R926-11-2. Definitions.

(1) "Hybrid" means a Low Emission and Energy Efficient vehicle as defined by the United States Environmental Protection Agency as authorized in 23 United States Code Section 166.

(2) "ILEV" means an Inherently Low Emission Vehicle as defined by the United States Environmental Protection Agency as authorized in 23 United States Code Section 166(b).

(3) "C Decal" means a clean vehicle radio frequency identification transponder issued by the department.

(4) "C Sticker" means a clean vehicle sticker issued by the department.

(5) "C Permit" means a permit issued by the department to the owner of an eligible ILEV or Hybrid vehicle.

(6) "Department" means the Utah Department of Transportation.

(7) "HOV" means a highway lane that has been designated for the use of high occupancy vehicles pursuant to Utah Code Section 41-6a-702.

R926-11-3. Permitting of Eligible Vehicles.

(1) Owners of an eligible ILEV and Hybrid vehicle registered in the state of Utah shall qualify for a C Decal, C Sticker, and C Permit upon application to the Department under permitting processes and payment of a fee defined under this rule.

(2) The owner of a vehicle issued a C Decal, C Sticker, and a C Permit is prohibited from placing the C Decal, and C Sticker on any vehicle other than the vehicle for which the Department has issued a C Decal and C Permit. Posting a C Decal on a vehicle other than the vehicle for which the Department has issued a C Decal, C Sticker, and C Permit will render the vehicle owner ineligible to participate in the Clean Fuel Vehicle Program.

(3) The owner of a vehicle issued a C Decal and C Sticker must have in the person's immediate possession the C Permit issued by the Department for that vehicle.

(4) The C Decal must be placed in the windshield of the vehicle, centered near the rearview mirror and 4 inches from the top of the windshield. If the vehicle has an AS-1 line, the C Decal must be mounted below the line. The C Decal must be mounted directly onto the windshield and cannot be mounted with tape or any other device.

(5) The C Sticker must be placed on the vehicle's right side on the rear of the vehicle in the upright position. The C Sticker must be placed using the sticker's adhesive backing and cannot be affixed with tape or any other device.

(6) The Department shall maintain and publish a listing online of all ILEV and Hybrid vehicle makes and models eligible for a C Decal, C Sticker, and C Permit.

(7) The Department will charge a fee for the issuance of a C Decal and C Sticker. The amount of the fee will be posted on the application in the amount established by the Department in

accordance with Utah Code Section 63J-1-504.

(8) The Department may restrict use of the HOV facility by single-occupant vehicles with C Decals and C Stickers if the operation of the facility becomes degraded. For the purposes of this rule, an HOV facility is considered degraded if vehicles operating on the facility are failing to maintain a minimum average operating speed of 45 miles per hour 90 percent of the time over a consecutive 180 day period, during morning or evening weekday peak hour periods (or both).

R926-11-4. Issuance of C Decals and C Permits.

(1) Except as set forth in subsection (2), the Department may not issue more than 6,000 C Permits and their associated C Decals and C Stickers.

(2) Not more frequently than once a year, the Department may evaluate the operation of the HOV facility and determine whether the facility will continue to operate at an acceptable level of service. For the purposes of this rule, an HOV facility is considered to be operating at an acceptable level of service if vehicles operating on the facility are maintaining a minimum average operating speed of 55 miles per hour 90 percent of the time over a consecutive 180 day period, during morning or evening weekday peak hour periods (or both). Based on that evaluation and if the Department determines that additional single-occupant vehicles with a C Decal may operate in the HOV lane without compromising operation of the facility, the Department may increase the number of clean fuel decals issued beyond the minimum set forth in subsection R926-11-4(1) and shall issue the appropriate number of C Decals to eligible applicants as set forth under subsection R926-11-4(5).

(3) Vehicle owners with an eligible ILEV or Hybrid vehicle as defined by this rule must submit an application to the Department for a C Decal, C Sticker and C Permit. The application, approved and issued by the Department, shall contain the vehicle owner's name, the license plate number, the vehicle identification number, and the ILEV or Hybrid vehicle make and year model as a condition for obtaining a C Decal, C Sticker and C Permit.

(4) A vehicle owner must pay the fee for the issuance of a C Decal, C Sticker, and C Permit within 30 days of the application being approved. If the owner does not pay the fee within 30 days, the application will be closed. After the application is closed, a vehicle owner must submit a new application for a C Decal, C Sticker, and C Permit.

(5) If more applications for C Decals, C Stickers, and C Permits are received than the total number the Department may issue at any one time, C Decals, C Stickers, and C permits will be offered to applicants in the order that applications are approved as C Decals become available. The number of available C Decals will be published on the C Decal website.

KEY: hybrid vehicles, C Decals, C Stickers, C Permits**August 23, 2017****41-6a-702****Notice of Continuation December 18, 2013****72-6-121**

R994. Workforce Services, Unemployment Insurance.**R994-401. Payment of Benefits.****R994-401-101. Payment of Benefits.**

Eligibility is established and benefits are paid on a weekly basis. The week starts on Sunday and ends on Saturday. Benefits do not become due until the end of the week for which benefits are claimed.

R994-401-201. Weekly Benefit Amount (WBA), Maximum Benefit Amount (MBA), and Monetary Determination.

(1) The formulas for determining the WBA and the MBA are found in Section 35A-4-401. For purposes of calculating WBA and MBA and for all other relevant purposes, "total insured workers" is defined as the sum of the monthly total of reported insured workers during the calendar year or fiscal year (as applicable).

(2) The wages used to determine the WBA and the MBA are limited to wages reported to the Department by base period employers and verifiable wages paid by additional base period employers reported by the claimant in the initial claim. If an employer does not report wages and the claimant can verify wages from that employer, those wages may be included.

(3) The Department will send the claimant a "Notice of Monetary Determination." The notice will inform the claimant of the WBA, MBA, and the wages used to determine the claimant's monetary eligibility. The notice will also inform the claimant of his or her right to appeal the monetary determination. The claimant must notify the Department of any errors in the monetary determination. The time limit for notifying the Department of any errors or for appealing a monetary determination is the same as filing an appeal from an initial Department determination and is governed by rules R994-508-102 through R994-508-104.

(4) The monetary determination is based on the wages actually paid during the base period regardless of when the work was performed.

(5) To be monetarily eligible, a claimant must have earned base period wages of 1 and 1/2 times the high quarter wages and also meet a minimum dollar amount as established by the monetary base period wage requirement as defined in Section 35A-4-201.

(6) For any claimant whose benefit year is effective on or before January 1, 2011, if the claimant is not monetarily eligible under the 1 and 1/2 times requirement in paragraph (5) of this section, but meets the monetary base period wage requirement, the claimant can still be eligible under this section if the claimant had earnings of at least five percent of the "monetary base period requirement for insured work," as defined in Subsection 35A-4-201(17), in each of at least 20 weeks during the base period. The earnings must be for work performed during each of the 20 weeks, all of which must fall within the base period, regardless of when the claimant received payment for the work. The requirement that the claimant show work and earnings in 20 weeks is only met if the claimant was paid wages as defined by the definition of "wages paid" in R994-401-202.

(7) The dollar amount for each of the 20 weeks required to establish eligibility under subsection (6) of this section will be determined by the monetary base period requirement for insured work in effect for the calendar year in which the initial claim is filed even if some or all of the 20 weeks are in a different calendar year.

(8) If the claimant is determined monetarily ineligible under the 1 and 1/2 times standard, and the claimant's benefit year is effective on or before January 1, 2011, it is the claimant's responsibility to show 20 weeks of covered employment which meet the minimum dollar amount. Acceptable proof of covered employment includes:

(a) appropriately dated check stubs issued by the employer;

(b) a written statement from the employer showing dates of employment and the amount of earnings for each week;

(c) time cards;

(d) canceled payroll checks; or

(e) personal or business records kept in the normal course of employment that would substantiate work and earnings.

(9) An employer's potential liability is based on its proportion of the claimant's base period wages. Employers will be informed of the wages used in determining a claimant's monetary entitlement, the employer's potential liability for benefits costs, and the right to and time limitation for requesting relief of charges or a correction to wages. A contributory employer is given a notice of all benefit costs each quarter and has the opportunity to report any errors or omissions to the Department at that time as well. The quarterly notices give the employer 30 days to advise the Department of any corrections, as provided in Subsection 35A-4-306(3).

(10) A party failing to file a timely appeal or protest may lose its right to have the monetary determination corrected. An untimely appeal or protest may be considered if the party had good cause, as defined in R994-508-104.

(11) The Department may revise the monetary determination after the expiration of the appeal time if there has been a mistake as to the facts or the revision would be substantial and required by fairness for a party who did not have access to the information and therefore could not have reasonably filed a timely appeal. The decision to revise a monetary determination after the appeal time has expired is discretionary with the Department.

R994-401-202. Wages Used to Determine Monetary Eligibility.

(1) "Wages paid" include those wages actually received by the worker and wages constructively paid, provided the employer's liability for payment has become unconditionally established. Wages are considered constructively paid, for the purposes of this section, on the earliest of: the next regular pay day in accordance with the employer's customary payment practices, the day required by contractual agreement, or as required by state law.

(2) Quarterly wages are all wages paid or constructively paid during a quarter regardless of when those wages are earned. Bonus or lump sum payments which do not meet the definition of vacation and severance pay in R994-405-701 et seq, made within the quarter which were not due on any specific day shall be treated as wages paid during the quarter in which the payment is made unless a request is made by the claimant for apportionment to the calendar quarters in which the remuneration was earned. Any such request must be received by the Department within ten days of the issuance of the monetary determination as provided by Subsection 35A-4-401(7).

R994-401-203. Retirement or Disability Retirement Income.

(1) A claimant's WBA is reduced by 100% of any retirement benefits, social security, pension, or disability retirement pay (referred to collectively in this section as "retirement benefits" or "retirement pay") received by the claimant. Except, for claims with an effective date on or after July 4, 2004, and on or before December 11, 2010 the reduction for social security retirement benefits will only be 50%. For claims with an effective date on or after December 12, 2010, there is no reduction for social security retirement benefits. The payments must be:

(a) from a plan contributed to by a base-period employer. Social security payments are counted if a base period employer contributed to social security even if the social security payment is not based on employment during the base period;

(b) based on prior employment and the claimant qualifies

because of age, length of service, disability, or any combination of these criteria. Disability payments must be based, at least in part, by length of service. Savings plans such as a 401(k) or IRA should not be used to reduce the WBA Payments from workers' compensation for temporary disability, black lung disability income, and benefits from the Department of Veterans Affairs are not counted because the amount of the payment is based on disability and not on length of service. Payments received as a spouse or beneficiary are not counted. That portion of retirement benefits payable to a claimant's former spouse is not counted if the paying entity pays the former spouse directly and it is pursuant to court order or a signed, stipulated agreement in accordance with the law;

(c) periodic and not made in a lump sum. Lump sum payments, even if drawn from the employer's contributions to a fund established for the purpose of retirement, are not treated as severance pay under Subsection 35A-4-405(7); and

(d) payable during the benefit year. A claimant's WBA is not reduced if the claimant is eligible for, but not receiving, retirement income. However, if the claimant subsequently receives a retroactive payment of retirement benefits which, if received during the time unemployment insurance claims were filed, would have resulted in a reduced payment, an overpayment will be established. The period of time the payment represents, not the time of the receipt, is the determining factor. An assumption that a claimant is entitled to receive a pension, even if correct, is not sufficient basis to recompute the WBA. However, if a claimant has applied for a pension and expects to be determined eligible for a specific amount attributable to weeks when Unemployment Insurance benefits are payable, and the claimant is only awaiting receipt of those payments, a reduction of the claimant's WBA will be made.

(2) A claimant who could be eligible for a retirement income, but does not apply until after the Unemployment Insurance benefits have been paid, will be at fault for any overpayment resulting from a retroactive payment of retirement benefits.

(3) The formula for recomputation of the MBA in the event a claimant begins receiving retirement income after the beginning of the benefit year is found in Subsection 35A-4-401(2)(d). The recomputation is effective with the first full calendar week in which the claimant is eligible to receive applicable retirement benefits or adjustments to those benefits.

R994-401-301. Partial Payments - General Definition.

(1) A claimant's earnings that are equal to or less than 30 percent of the WBA will not result in a reduction of the WBA. The claimant's gross weekly earnings over 30 percent of the WBA will be deducted dollar for dollar from the WBA in the week in which it was earned. A claimant who earns less than the WBA and files a claim may be credited with a waiting week, or paid a partial payment. A claimant who earns equal to or more than the WBA will not be credited with a waiting week nor be eligible for any partial payment for that week.

(2) All work and earnings must be reported on a weekly basis. For example, when an otherwise eligible claimant is required to report income from a farm, and is paid one day of holiday pay and then accepts a one-day temporary job, the work and earnings from all three sources must be reported.

(3) Earnings are reportable in the week the work is performed which may be different from the week payment is received. If a claimant receives payment for commission sales, or other periodic earnings, the income must be attributed to, and reported in, the week when the work was performed.

(4) Reportable earnings which a claimant must report on the weekly claim include any and all wages, remuneration, or compensation for services even if the employer is not required to pay contributions on these wages.

R994-401-302. Liability of Part-time Concurrent Reimbursable Employers When There Is No Job Separation from the Part-Time Reimbursable Employer.

(1) If the claimant worked for two or more employers during the base period and is separated from one or more of these employers, but continues in the regular part-time work with a reimbursable employer, the nonseparating part-time employer will not be liable for benefit costs provided;

(a) the claimant earned wages from a nonseparating employer within seven days prior to the date when the claim was filed,

(b) the claimant is not working on an "on call" basis,

(c) the number of hours of work have not been reduced, and

(d) the nonseparating employer makes a request that it not be held liable for benefit costs within ten days of the first notification of the employer's potential liability.

(2) The claimant's WBA will be determined on the basis of the total base period employment and earnings, however, earnings from the part-time reimbursable employer will be excluded from the calculation of the MBA.

(3) If the claimant is later separated from this employer within the benefit year or the claimant's hours of work are reduced below the customary number of hours worked during the base period, the reimbursable employer will be liable to pay the proportionate amount of benefit payments paid thereafter. A new monetary determination can also be made at the request of the claimant and would include all base period wages. The effective date of the revised monetary determination will be the first day of the week in which the request is made. See R994-307-101 for contributory employers.

R994-401-303. Income the Claimant Must Report While Receiving Unemployment Benefits.

(1) All payments whether an hourly wage, salary, or commission paid for the performance of any service shall be reportable unless specifically identified as an exception in R994-401-304 or R994-401-305.

(2) Gratuities or tips paid directly to an employee by a customer or the employer for a service provided are reportable.

R994-401-304. Income Which May Be Reportable Under Certain Circumstances.

(1) A bonus paid as a direct result of past performance of service for a specific period prior to the separation is not reportable with respect to any week after the separation. A bonus is a payment given to an employee in addition to usual wages. If the payment is made contingent upon termination it will be considered a severance payment. Payments given at the time of separation that are based on years of service will also be considered severance payments. Severance payments are reportable in accordance with Subsection 35A-4-405(7).

(2) If a claimant is hired to start working on a certain day and the work is not available as of that date but the employer puts the claimant on the payroll as of that date, the claimant is considered employed and those wages are reportable.

(3) Any payment made in consideration of training that is required by the employer is considered to be reportable income unless shown to be:

(a) expenses necessary for school, for example, tuition, fees, and books;

(b) travel expenses;

(c) actual costs for room and board where costs are created as a necessary expense for the schooling; and

(d) the payments are exempt from income tax liability.

(4) If a claimant is being paid under a contract for the express purpose of being available to an employer, and there are limits placed upon the individual either as to how much earnings, if any, may be earned while receiving these payments,

or on the time the individual must hold himself or herself available to the employer, the payment is considered reportable income.

(5) Any payments in kind are reportable, including the cash value for meals, lodging, or other payment unless the meals and lodging are excluded from the definition of wages by the Internal Revenue Service as under the following conditions:

(a) Meals that are furnished:

(i) on the business premises of the employer;

(ii) for the convenience of the employer;

(iii) without charge for substantial non-compensatory business reasons, not for the purpose of additional compensation. Substantial noncompensatory business reasons will be limited to meals which are provided:

(A) to have employees available for emergency call;

(B) to have employees with restricted lunch periods;

(C) because adequate eating facilities are not otherwise available.

(b) Lodging that is furnished:

(i) on the business premises of the employer;

(ii) as a condition of employment;

(iii) for the convenience of the employer, for example, to have an employee available for call at any time.

(6) Pensions that do not meet the criteria in R994-401-203 are not reportable income.

R994-401-305. Income a Claimant Is Not Required to Report While Receiving Unemployment Benefits.

Payments which are received for reasons other than the performance of a service are not reportable income. Some examples are:

(1) Payments from corporate stocks and bonds;

(2) Public service in lieu of payment of fines;

(3) Fees paid for jury duty or as witness fees will be considered reimbursement for expenses;

(4) Amounts paid specifically, either as an advance or reimbursement, for bona fide, ordinary, and necessary expenses incurred or reasonably expected to be incurred in the business of the employer. If an accounting by the employee is not required by the employer for actual expenses, the Department shall not require itemization;

(5) Payments specifically identifiable as not being provided for the rendering of service will not be considered wages including grants, public or private assistance or other support payments;

(6) Money or other considerations which are normally provided as a matter of course to immediate family members;

(7) Income from investments;

(8) Disability or permanent impairment awards under the Workers' Compensation Act; and,

(9) Payment attributable to the value of any equipment owned by the claimant and necessary for the performance of the job. If there is no contract of hire or the contract does not delineate what portion is payable for the equipment, the Department will determine the claimant's wages based on the prevailing wage for similar work under comparable conditions.

KEY: unemployment compensation, benefits

June 21, 2017

35A-4-401(1)

35A-4-401(2)

35A-4-401(3)

35A-4-401(6)